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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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2: pir2:*
3: pir3:*
4: pir4:*
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                   GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
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G84919
G86352
AR8123
C86222
S51565
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T50504
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transcription fact hypothetical prote transcription fact transcription fact protein W10D9 4 [intranscription fact DR1-like protein - TATA-binding protein - TATA-binding protein - TATA-binding protein probable transcrip hypothetical protein hypothetical protein probable dna binding archaeal histone A
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ALIGNMENTS

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TASSULT 2 T45874 transcription factor NF-Y, CCAAT-binding-like protein - Arabidopsis thaliana N;Alternate names: protein F4P12.40 C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 04-Feb-2000 #sequence_revision 04-Feb-2000 #text_change 09-Jul-2004 C;Accession: T45874 R;Bloecker, H, Mewes, H.W.; Lemcke, K.; Mayer, K.F.X.; Quetier, F.; Salanoubat, M submitted to the Protein Sequence Database, January 2000 A;Reference number: Z23016 A;Accession: T45874 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-228 <blo> A;Residues: 1-228 <blo> A;Residues: 1-228 <blo> A;Cross-references: UNIPROT:091F13; EMBL:AL132966 A;Experimental source: cultivar Columbia; BAC clone F4P12 C;Genetics: C;Genetics: 3 A;Introns: 75/2; 118/3; 120/3; 145/3; 164/3; 179/3; 213/1 A;Note: F4P12.40</blo></blo></blo>	Query Match Best Local Similarity 83.2%; Pred. No. 3.2e-47; Matches 84; Conservative 2; Mismatches 8; Indels 7; Gap8 1; Qy REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXOBCVSEFISFITSBASXKC 60	s22820 transcription factor NF-Y, CCAAT-binding, chain B - maize N;Alternate names: CAAT-box DNA-binding protein C;Species: Zea mays (maize) C;Date: 29-Jan-1998 #sequence_revision 06-Feb-1998 #text_change 09-Jul-2004 C;Accession: \$22820 R;Li, X.Y.; Mantovani, R.; van Huijsduijnen, R.H.; Andre, I.; Benoist, C.; Mathis, Nucleic Acids Res. 20, 1087-1091, 1992 A;Title: Evolutionary variation of the CCAAT-binding transcription factor NF-Y. A;Reference number: \$22816; MUID:92195809; PMID:1549471 A;Accession: \$22820 A;Molecule type: mRNA A;Residues: 1-179 <lix> A;Cross-references: UNIPROT:P25209; EMBL:X59714 C;Superfamily: transcription factor HAP3 C;Keywords: DNA binding; transcription regulation F;30-119/Domain: DNA binding #status predicted <dna></dna></lix>

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### B4810

Reproduct In At 2938880 [imported] - Arabidopsis thalians

C; Species: Arabidopsis thaliana (mouse-ear cress)

C; Species: Arabidopsis thaliana (mouse-ear cress)

C; Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004

C; Accession: Re4810

C; Accession: Re4810

R; Lin, X:; Kaul, S:; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.;

M; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L.

M; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, Ceuss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, Ceuss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, Ceuss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, Ceuss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, Ceuss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, Ceuss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, C
                                                                                                                                                             transcription factor, CCAAT-binding, chain A - Arabidopsis thaliana
N;Alternate names: protein DL3310W
C;Species: Arabidopsis thaliana (mouse-ear cress)
A;Variety: columbia
C;Date: 03-Aug-1998 #sequence_revision 03-Aug-1998 #text_change 09-Jul-2004
C;Accession: G71407
R;Bevan, M; Bancroft, I:; Bent, E:; Love, K.; Goodman, H.; Dean, C.; Bergkamp, R.; Dirk
P; Wedler, H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Pohl, T.M.; Terryn, N.; Giel
avanagh, T.; Hempel, S.; Kotter, P.; Entian, K.D.; Rieger, M.; Schaeffer, M.; Funk, B.
Nature 391, 485-488, 1998
A;Authors: Mueller-Auer, S.; Silvey, M.; James, R.; Montfort, A.; Pons, A.; Puigdomenech
erhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechman, S.; Ans
C.; Chalwatzis, N.
A;Accession: G71407
A;Schaule: nucleic acid sequence not shown; translation not shown
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A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. A;Reference number: A84420; MUID:20083487; PMID:10617197
A;Accession: E84810
A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-138 <STO>
A;Cross-references: UNIPROT:Q9SLG0; GB:AB002093; NID:g3928076; PIDN:AAC79602.1; C;Genetics:
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A;Map position: 2
C;Superfamily: transcription factor HAP3
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A; Residues: 1-161 <BEV>
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80; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REQDRFLPIANISRIMKRGLPLNGK-----IAKDAKETMQECVSEFISFVTSEASDKC
4COP9-4G3845
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 405.5; DB 2; Pred. No. 9.1e-46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 407.5; DB 2
Pred. No. 8.6e-46;
                                                                 GB: Z97336;
                                                                 NID: g2244788;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                 PIDN: CAB10233.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          228;
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                                                                 PID:g22448
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Nature 402, 761-768, 1999
Nature 402, 761-768, 1999
A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana
A;Reference number: A84420; MUID:20083487; PMID:10617197

A; Reference number: A84420; A; Accession: F84508

A; Molecule type: DNA A; Residues: 1-215 <STO>

;Status: preliminary

A;Cross-references: UNIPROT:Q9SIT9; GB:AE002093; NID:g4558662; PIDN:AAD22680.1; GSPDB:GN C;Genetics:

A;Gene: At2g13570 A;Map position: 2

R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L.-Cess, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J.

probable CCAAT-box binding trancription factor [imported] - Arabidopsis thaliana (c)Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 C;Accession: F84508

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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-178 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; N.M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.B.; Umayam, L.; Tallon, L.c. euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        probable CCAAT-box binding trancription factor [imported] - Arabidopsis thaliana (;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 C;Accession: A84788
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C;Superfamily: transcription factor HAP3
C;Keywords: DNA binding; transcription regulation
F;20-109/Domain: DNA binding #status predicted <DN
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                                                                                                                                                                                                                                                                                                                                                                                  A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana
A;Reference number: A84420; MUID:20083487; PMID:10617197
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                                                                                                                                                                                                                                                                                                                                                                     A; Accession: A84788
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Best Local
                                                                                                                                                                                           Query Match
                                                                                                                                                      Matches
                                                                                                                                                                                                                                 position:
                                                                                                                                                                        Local
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82
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                                                                                                           1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
                                                                                                                                                      78;
                                                                                                                                                                        Similarity
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                                  QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXE 100
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                                                                         REQURFLPIANISRIMKRGLPANGK-----IAKDAKEIVQECVSEFISFVTSEASDKC
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                                                                                                                                                      Conservative
                                                                                                                                                                        85.7%;
78.0%;
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Pred. No. 4.9
                                                                                                                                                                      Score 393.5; DB 2
Pred. No. 4.5e-44;
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                                                                                                                                                      Mismatches
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                                                                                                                                                                                           DB 2;
                                                                                                                                                      10;
121
                                                                                                                                                                                           Length 178;
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104 HQEKRKTINGEDILFAMSTLGFDSYVEPLKLYLQKFRE 141

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R;Li, X.Y.; Mantovani, R.; van Huijsduijnen, R.H.; Andre, I.; Benoist, C.; Math Nucleic Acids Res. 20, 1087-1091, 1992
A;Title: Evolutionary variation of the CCAAT-binding transcription factor NF-Y. A;Reference number: S22816; MUID:92195809; PMID:1549471
A;Accession: S22817
A;Molecule type: mRNA
A;Residues: 1-205 <LIX>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
S22817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     transcription factor NF-Y, CAAT-binding, chain B - chicken C;Species: Gallus gallus (chicken) C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change C;Accession: $24469
R;Benoist, C. submitted to the EMBL Data Library, January 1992
A;Reference number: $24469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
S24469
                                                                                                                                                                                                                   A;Cross-references: EMBL:X59710; NID:g35049; PIDN:CAA42230.1; PID:g35050 C;Superfamily: transcription factor HAP3 C;Keywords: DNA binding; transcription regulation F;51-140/Domain: DNA binding #status predicted <DNA>
                                                                                                                                                                                                                                                                                                                                                                                                                                     N;Alternate names: CAAT-box DNA-binding protein
C;Species: Homo sapiens (man)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 26-Aug-1999
C;Accession: S22817
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C;Superfamily: transcription factor HAP3
C;Keywords: DNA binding; transcription regulation
F;51-140/Domain: DNA binding #status predicted <DNA>
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A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-180 <BEN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 transcription factor NF-Y, CCAAT-binding, chain B - human
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Best Local S
Matches 66
                                                                                                                                                            Query Match
Best Local
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Best Local
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                        13
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                                                                                                                                           66;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                                                                                                                                                          h 73.5%;
Similarity 67.3%;
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QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXXRE 98
                                                                                                REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HQEKRKTINGEDILFAMSTLGFDSYVEPLKLYLQKFRE 141
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                                                                                                                                             Conservative
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70.3%;
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                                                                                                                                         12; Mismatches
                                                                                                                                                            Score 337.5; DB 2; Pred. No. 1.2e-36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 1.1e-36;
2; Mismatches 13;
                                                                                                                                         ..2e-36;
ies 13;
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                                                                                                                                                                                205;
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A;Cross-references: UNIPROT:P22569; GB:M55045; GB:J05701; NID:g203352; PIDN:AAA40887.1; C;Superfamily: transcription factor HAP3 C;Keywords: alternative splicing; DNA binding; transcription regulation F;53-142/Domain: DNA binding #status predicted <DNA>
                                                                                                                                                                                                                                                                                                                                                                                                                 C;Accession: A23692
R;Vuorio, T.; Maity, S.N.; de Crombrugghe, B.
J. Biol. Chem. 265, 22480-22486, 1990
A;Title: Purification and molecular cloning of the "A" chain A;Reference number: A23692; MUID:91093096; PMID:2266139
A;Accession: A23692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transcription factor, CCAAT-binding, chain A1 - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 04-Oct-1991 #sequence_revision 04-Oct-1991 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Hooft van Huijsduijnen, R.; Li, X.Y.; Black, D.; MatthemBO J. 9, 3119-3127, 1990
A;Title: Co-evolution from yeast to mouse: cDNA cloning A;Reference number: $12044; MUID:91006004; PMID:1698608
                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-207 < VUO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Keywords: alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GB:X55316; NID:g53362; PIDN:CAA39024.1; PID:g53363 C;Superfamily: transcription factor HAP3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Status: preliminary A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:P22569; GB:M86215 R;Hooft van Huijsduijnen, R.; Li, X.Y.; Black,
                                                                                                                                                                                                                                                                                                                                                                                            A; Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Residues: 1-207 < HOO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: S12045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Residues: 1-207 <LIA>
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                                                                                                                                                                            Matches
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                                                                                                                                                                                                Local Similarity
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  106
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                                                                                                                                1 REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEPISPITSEASXKC 60
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                      QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYRE 98
HOBKRKTINGEDILFAMSTLGFDSYVEPLKLYLQKFRE 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HOEKRKTINGEDILFAMSTLGFDSYVEPLKLYLOKFRE 143
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                                                                                       REQDIYLPIANVARIMKNAIPQTGK-----IAKDAKECVQECVSEPISFITSEASERC 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REQDIYLPIANVARIMKNAIPQTGK-----IAKDAKECVQECVSEFISFITSEASERC 105
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                                                                                                                                                                              Conservative
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Pred. No. 1.2e-36;
                                                                                                                                                                                              Score 337.5; DB 2;
Pred. No. 1.2e-36;
                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13;
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                                                                                                                                                                                                                Length
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transcription factor HAP3 - Emericella nidulans
(J.Species: Emericella nidulans, Aspergillus nidulans
(J.Species: Emericella nidulans, Aspergillus nidulans
(J.Ante: 21-Jan-1997 #sequence_revision 21-Jan-1997 #text_change 09-Jul-2004
(J.Accession: JC6080
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.A.; Hynes, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Sharp, J.A.; Davis, M.J.
R.Papagiannopoulos, P.; Andrianopoulos, A.; Andrianopoulos,
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A; Accession: 878116
A; Molecularia
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N,Alternate names: CAAT-box DNA-binding protein
C;Species: Petromyzon marinus (sea lamprey)
C;Date: 29-Jan-1998 #sequence revision 06-Feb-1998 #text_change 09-Jul-2004
C;Accession: S22818; S78116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Residues: 1-110,'R',112-209 <BEN>
A;Cross-references: EMBL:K59712; NID:g64217; PIDN:CAA42232.1;
C;Superfamily: transcription factor HAP3
C;Keywords: DNA binding; transcription regulation
F;54-143/Domain: DNA binding #status predicted <DNA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Li, X.Y.; Mantovani, R.; van Huljsduijnen, R.H.; Andre, I.; Benoist, C.; Mathis, Nucleic Acids Res. 20, 1087-1091, 1992
A;Title: Evolutionary variation of the CCAAT-binding transcription factor NF-Y.
A;Reference number: S22816; MUID:92195809; PMID:1549471
A;Accession: S22818
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A,Introns: 53/1; 90/1; 132/3
C,Superfamily: transcription
F,42-131/Domain: DNA binding
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                                                                                                                                                                                                                                                                                                            h 72.0%; Score 330.5; DB 2;
Similarity 66.3%; Pred. No. 1e-35;
65; Conservative 12; Mismatches 14;
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HQEKTKTINGEDILFAMSTLGFDSYVEPLKQYLQKYRE 144
                                     QXEKRKTINGDDLLWAMATLGFEDYIEFLKVYLXXYRE
                                                                                                                                                                                                                 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                                                                                                                                                        REQDIYLPIANVARIMKTSIPSSGK-----IAKDAKECVQECVSEFISFITSEASERC 106
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C;Accession: G86352
C;Accession: G86352
C;Accession: G86352
C;Accession: G86352
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, A.Autre 408, 816-820, 2000
A,Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khay, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Mait Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y.; N. M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, L.; euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Vanter, J. Nature 402, 761-768, 1999
Nature 402, 761-768, 1999
A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana.
A;Reference number: A84420; MUID:20083487; PMID:10617197
A;Accession: G84919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probable CCAAT-box binding trancription factor [imported] - Arabidopsis thaliana (;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004 C;Accession: G84919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein T26F17.20 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Map position: 2
C; Superfamily: transcription factor HAP3
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                                                                                                                                                                                                                                                                                                                                                                                                        A; Cross-references: UNIPROT: Q9SFD8;
                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-208 <STO>
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Best Local Similarity
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Best Local
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QXEKRKTINGDDLLWAMATLGFEDYIEFLKVYLXXYREXE 100
                                                                                                                   REQDRYLPIANISRIMKKALPXNGKXXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                                                                                         REODQYMPIANVIRIMRKTLPSHAK-----ISDDAKETIQECVSEYISFVTGBANERC
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                                                                                                                                                                                                                                 Score 308.5; DB Pred. No. 8e-33;
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Pred. No. 3.5e-35;
9; Mismatches 22;
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                                                                                                                                                                                                                                                                                                                                                                                                           GB:AE005172; NID:g6552738; PIDN:AAF16537.1; GSPDB:GN
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.S.; Maiti, R.;
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A;Cross-references: UNIPROT:P13434; EMBL:M20318; NID:g577522; PIDN:AAA53538.1; PID:g1716 R;van Dyck, L.; Pearce, D.A.; Sherman, F.
J. Biol. Chem. 269, 238-242, 1994
A;Title: PIM1 encodes a mitochondrial ATP-dependent protease that is required for mitoch A;Reference number: S43937; MUID:94103216; PMID:8276800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Map position: 2L
C;Superfamily: transcription factor HAP3
C;Keywords: DNA binding; nucleus; transcription regulation
F;36-125/Domain: DNA binding #status predicted <DNA>
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C;Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_change 09-Jul-2004
C;Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text_change 09-Jul-2004
C;Accession: A28123; S43937; S45755
R;Hahn, S.; Pinkham, J.; Wei R.; Miller, R.; Guarente, L.
Mol. Cell. Biol. 8, 655-663, 1988
Mol. Cell. Biol. 8, 655-663, 1988
A;Title: The HAP3 regulatory locus of Saccharomyces cerevisiae encodes divergent overlaph, Reference number: A93110; MUID:88174707; PMID:2832732
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A;Molecule type: DNA
A;Residues: 1-144 <GOF>
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Search completed: November 17, 2005, 08:59:36
Job time : 40 secs
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A;Cross-references: SGD:S0000117; MIPS:YBL021c
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A; Residues: 1-144 < VAN>
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A; Residues: 1-144 < HAH>
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N;Alternate names: protein YBL021c; protein YBL0441
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Best Local :
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                                                                                                                                AADKRKTINGEDILISLHALGFENYAEVLKIYLAKYRQQQ 128
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7	•	•	174	8	ADS16958	
8	•	•	178	σ	ABG70264	
9	•	٠	178	0	ABR40821	
10	•		178	8	ADI42322	
11	•		179	8	ADI 42323	
12	•	91.0	290	7	ADC23665	
13	•	٠	141	ω	AAG04651	
14	•	•	141	7	ADB37175	
15		•	141	7	ADF50740	
16	•	•	141	8	ADI41625	
17	•	90.3	141	æ	AD003369	
18	•	•	141	œ	ADO62929	
19	•	•	141	8	ADS16960	
20		•	182	ű	ABG70259	
21		•	182	σ	ABR40742	
22		•	177	ហ	ABG70249	
23		٠	177	σ	ABR40732	
24		•	177	7	ADC23649	
25		•	215	æ	ADI42328	

Sherman BK, Creelman RA,

Riechmann JL, Ratcliffe O,

Jiang C, Adam LJ,

Heard JE, Reuber TL,

Haake V; Keddie J,

Broun PE;

4 5	44	43	42	41	40	39	38	37	36	35	34	ω G	32	31	30	29	28	27	26
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88.6	88.6	88.6	88.8		88.8		88.8		88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	89.2	89.2	89.2
164	164	164	228	228	228	228	228	228	228	228	185	185	185	162	162	162	174	174	174
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Adc23651	Abr40733	Abg70250	Ads16962	Ado63035	Ado03497	Ad143709	Adc23666	Abr40822	Abr40826	Abg70263	Ads16965	Ado63668	Ad142329	Adc23663	Abr40739	Abg70256	Adc23647	Abr40731	Abg70248
Polypepti	Zea mays	LEC-1-rel	Plant pol	Transcrip	Thalecres	Plant tra	Polypepti	Arabidops	Arabidops	LEC-1-rel	Plant pol	Transcrip	Plant tra	Polypepti	Glycine :	LEC-1-rel	Polypepti	Momordica	LEC-1-rel

ALIGNMENTS

Plant transcription factor #319. 22-APR-2004 (first entry) ADI42339;

ADI42339 standard; protein; 160

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RESULT 1
AD142339
ID A2339
ID 
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                                                                                                                                                                                          (SHER/)
(RIEC/)
(HIAN/)
(HEAN/)
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(CREE/)
(RATC/)
(RADAM/)
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                                                                                         HEARD J E.
HAARG V.
HAARG V.
CREELMAN R A.
RATCLIFFE O.
ADAM L J.
REUBER T L.
KEDDIE J.
BROUN P E.
PILGRIM M L.
DUBELL A N.
PINEDA O.
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RIECHMANN J L.
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ARESULT 2
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polynucleotide of any one of more than 500 nucleotide sequences fully defined in the specification or its complement. The method of the invention can be used to produced a plant having altered traits such as: enhanced tolerance to abiotic stress; glyphosphate tolerance; hormone sensitivity; disease resistance; sugar sensing; early or late flowering; altered flower structure, change in steme bifurcations, altered branching pattern, reduced apical dominance, reduced trichome density; lack of trichomes; reduced ectopic trichome development; altered trichome
                                                                                                                                                                                                                                                                                                                                                                                                Abiotic stress tolerance; Lil-related CCAAT transcription factor; B domain; heat tolerance; drought stress tolerance; cold tolerance; B tress tolerance; MYB-related transcription factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes a transgenic plant comprising a recombinant polynucleotide of any one of more than 500 nucleotide sequences ful
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25-FEB-2003; 2003US-00374780
30-SEP-2003; 2003US-00675852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-DEC-2004 (first entry)
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                                                                                           25-FEB-2004; 2004WO-US005654.
                                                                                                                                                                                                                                        WO2004076638-A2
                                                                                                                                                                                                                                                                                                                                                                        seedling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plant polypeptide #18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADS16959 standard; protein; 160 AA
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                                                                                                                                                                                                                                                                                                            Undentified
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85.1%;
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Pred. No. 2.2e-54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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(MEND-) MENDEL BIOTECHNOLOGY INC
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Sherman BK, Riecanna, Adan Haake V, Creelman RA, Adan Pineda O, Repetti PP, Cent Pineda RW, Pilgrim ML; Riechmann JL, Ratcliffe O, Jiang C, Hea reelman RA, Adam LJ, Reuber LT, Keddie JS Heard JE; ဓ Dubell AN; Broun PE;

WPI; 2004-653405/63

New transgenic plant having increased abiotic stress tolerance as compared to non-transgenic plants of the same species, useful in bioinformatic research methods.

Disclosure; Fig 10; 297pp; English.

constress tolerance as compared to non-transgenic plants of the same general plants of the same concerning a polypeptide member of the G482 subclade of the non-ECL-like control approved to non-transgenic plants of the same control plants of the same concerning a polypeptide member of the G482 subclade of the non-ECL-like colerance. The invention also relates to a seed from the transgenic colerance. The invention also relates to a seed from the transgenic colerance to ablotic stress comprising providing an expression vector comprising the polymelectide sequence encoding the polypeptide, and cregilatory elements are effective to control expression of the nucleotide sequence in a target plant, introducing the expression of the nucleotide sequence in a target plant, introducing the expression of the nucleotide sequence in a target plant, introducing the expression vector into a splant cell, growing the plant cell, allowing the plant to overexpress the comparison of the nucleotide sequence in a target plant, introducing the expression of the nucleotide sequence in a target plant; introducing the expression vector into a plant cell, growing the plant cell, allowing the plant to overexpress the comparison of the same species, and a method for comparison and identifying one or more abiotic stress tolerant plants with the vector to the comparison and providing the vector to compared to non-transgenic plants of the same species, and a method for the nucleotide to the plant cell, the comparison plants of the same species. The transgenic comparison providing regulates transcription of the DNA. The regulation of transgenic plants of the same species and salt stress tolerance. The transgenic plants of the same species comprising the motif coAAT, where the binding regulates transgenic plants of the same species. The transgenic plants of the same species in the seame species and salt stress tolerance. The transgenic plants of the same comprise in its genome a transgenic plants of the same comparison of the comparison of the pr polypeptide used The invention relates to a transgenic plant having increased Ħ the scope of the invention abiotic

Sequence 160 AA;

Similarity

Length

밁 Ś 밁 S Matches Query Match Best Local (80 61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101 66; _ REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC REQDRYLPIANISRIMKKALPPNGK-----IAKDAKDTMQECVSEFISFITSEASEKC Conservative 92.3%; o ; Score 423.5; DB 8; Pred. No. 2.2e-54; Mismatches 8 Indels 7; Gaps 60 79

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ADO63706 standard; pi
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15-JUL-2004 (first of the content of content
                        CC increased tolerance to low nitrogen conditions, increased tolerance to conditions, increased tolerance to conditions, increased tolerance to conditions, increased tolerance to disease, including cC fungal disease and particularly Rysiphe, Pusarium and Botrytis, cC increased tolerance to multiple fungal pathogens, increased resistance to gyphosate, increased sensitivity to ABA, reduced sensitivity to ABA, cC clierance described increased tolerance to sugars, altered sensitivity to ACC, altered sugar sensing, increased tolerance cC flowering, altered flower structure, loss of flower determinacy, reduced cfertility, altered shoot meristem development, altered branching pattern, cc altered stem morphology, altered vascular tissue structure, reduced cC apical dominance, altered trichome development, altered trichome development, altered trichome development, altered trichome structure, altered seed cipening, altered seed germination, slow growth, fast growth, altered seed cli differentiation, caltered sensores, abnormal embryo development, altered phase change, caltered sensores, abnormal embryo development, altered programmed cell death, lethality when overexpressed, altered necrosis patterns, increased cli death, lethality when overexpressed, altered seed leaf size and mass, light content size, increased biomass, large seedlings, dwarfed plants, dark cc green reave, change in leaf shape, increased leaf size and mass, light content, altered seed coloration, altered seed seed seed seed oil content, altered seed oil content, altered seed oil content, altered seed oil content, altered anthogyanin levels and content, altered anthogyanin content, and content, altered anthogyanin content, and content, altered anthogyanin levels and content, and content, altered anthogyanin levels and content, and content, altered anthogyanin levels and content, altered anthogyanin levels and content, and content, altered anthogyanin levels and content.
        seed, increased leaf wax, increased le content, altered seed protein content, altered leaf prenyl lipid content, inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             increased tolerance to osmotic stress, increased tolerance to cold, increased germination in cold, increased tolerance to heat, increased germination in heat, increased tolerance to freezing conditions,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequences can be used to produce transgenic plants, which overexpress (II), where the transgenic plant has an altered trait as compared to a non-transgenic plant or wild-type plant. The transgenic plant comprises an altered trait selected from increased tolerance to abiotic stress,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New recombinant polynucleotide encoding transcription factor polypeptides, useful for producing transgenic plants with adproperties compared to a reference plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-2002; 2002US-0411837P
17-DEC-2002; 2002US-0434166P
24-APR-2003; 2003US-0465809P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to novel plant transcription factor proteins (I) and nucleotide sequences (II) (ADO61534-ADO63778). The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 2173; 510pp; English
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DB; ADO63705.
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Keddie JS,
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Sherman E
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The invention relates to a transgenic plant having increased abiotic stress tolerance as compared to non-transgenic plante of the same species, where the transgenic plant comprises in its genome a transgene encoding a polypeptide member of the G482 subclade of the non-LEC1-like clade of proteins of the LIL-related CCAAT transcription factor family, where overexpression of the polypeptide member confers abiotic stress tolerance. The invention also relates to a seed from the transgenic plant, a method for producing a transgenic plant having increased tolerance to abiotic stress comprising providing an expression vector comprising the polypucleotide sequence encoding the polypeptide, and regulatory elements operably linked to the nucleotide sequence, where the regulatory elements are effective to control expression of the nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman B
Haake V,
Pineda O,
                                                                                                                                                                                                                                                                                                                                                                                                                           New transgenic plant having increased abiotic compared to non-transgenic plants of the same bioinformatic research methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 not form part of the printed specification, electronic, format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-653405/63.
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30-SEP-2003; 2003US-00675852
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plant polypeptide #16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004076638-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          decreased anthocyanin levels. Note:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MEND-) MENDEL BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Creelman RA, Ad,
, Repetti PP, Ce
RW, Pilgrim ML;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RECORYLPIANISRIMKKALPPNCK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QKEKRKTINGDDLLWAMATLGFEDYIEPLKVYLARYREAEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Riechmann JL, A., Riechmann RA, Adam LJ, A., Century KS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92.3%;
ilarity 85.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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A
                                                                                                                                                                                                                                                                                                                                                                    297pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ratcliffe O, Jiang C, Hea
am LJ, Reuber LT, Keddie JS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
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Pred. No. 2.5e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .5e-54;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    stress tolerance species, useful i
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Heard
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Broun
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PB;
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plant, introducing the expression

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RESULT 5
ADO63718
ADO63718
AC ADO6
XX ADO6
XX ADO6
XX Plan
CR Tran
XX Plan
CR 91yr
XX OSSC
PN WO2C
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XX HO2C
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XX HO2C
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Best Local 9
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                                                                                           18-SEP-2002; 2002US-0411837P.
17-DEC-2002; 2002US-0434166P.
24-APR-2003; 2003US-0465809P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Plant; transcription factor; transgenic plant; abiotic stress tolerance; osmotic stress tolerance; cold tolerance; heat tolerance; low phosphate tolerance; fungal disease; low phosphate tolerance; fungal disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Glycine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              glyphosate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      plant cell, growing the plan
polypeptide and identifying
                                                                                                                                                                                                                                                                                                                                                                                    15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transcription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO63718 standard; protein; 174 AA.
                                                                                                                                                                                                                                                                                   18-SEP-2003; 2003WO-US030292.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004031349-A2
    (MEND-) MENDEL BIOTECHNOLOGY INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       max.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QKEKRKTINGDDLLWAMATLGFEDYIEPLKVYLARYREAEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REQDRYLPIANISRIMKKALPPNGK-----IAKDAKDTMQECVSEPISFITSEASEKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              en tolerance; low phosphate tolerance; fungal disea, resistance; flowering; fertility; seed development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             factor G3477 orthologous sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the plant cell, allowing the plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92.3%;
85.1%;
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Pred. No. 2.5e
0; Mismatches
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> 61 27

QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101

QKEKRKTINGDDLLWAMATLGFEDYIEPLKVYLARYREAEG

15-JUL-2004

(first entry)

ADO63704;

ADO63704 standard; protein; 174

밁 S

Matches

96;

Conservative

0,

Mismatches

8

Indels

7;

Gaps

1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC

REQDRYLPIANISRIMKKALPPNGK-----IAKDAKDTMQECVSEFISFITSEASEKC

79

8

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CC germination in heat, increased tolerance to freezing conditions,
CC increased tolerance to low nitrogen conditions, increased tolerance to
CC low phosphate conditions, increased tolerance to disease, including
CC fungal disease and particularly Erysiphe, Fusarium and Botrytis,
CC increased tolerance to multiple fungal pathogens, increased resistance to
CC glyphosate, increased sensitivity to ABA, reduced sensitivity to ABA,
CC increased sensitivity to ACC, altered sugar sensing, increased tolerance to
CC flowering, altered flower structure, loss of flowering, late
CC flowering, altered shoot meristem development, altered branching pattern,
CC altered stem morphology, altered vascular tissue structure, reduced
CC altered stem morphology, altered vascular tissue structure, reduced
CC altered trichome structure, loss of flower determinacy, reduced
CC altered trichome structure, loss of flower determinacy, reduced
CC altered trichome structure, loss of flower determinacy, reduced
CC altered trichome structure, altered root development, altered shade
CC altered trichome structure, altered root development, altered shade
CC altered cell proliferation, altered cell differentiation,
CC altered senscence, abnormal embryo development, altered programmed cell
CC altered senscence, abnormal embryo development, altered programmed cell
CC death, lethality when overexpressed, altered necrosis patterns, increased
CC green leaves, change in leaf shape, increased leaf size and mass, light
CC green leaves, change in leaf shape, increased leaf size and mass, light
CC green leaves, change in leaf shape, increased leaf size and mass, light
CC green leaves, increased leaf stry acids, altered seed oil
CC content, altered seed protein content, altered seed shape, large
CC seed, increased and note provention levels. Note: The sequence data for this patent did
CC decreased anthocyanin levels. Note: The sequence data for this patent did
CC decreased anthocyanin levels. Note: The sequence data for this patent did
CC decreased seed conte
Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jiang C,
Riechmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to novel plant transcription factor proteins (I) and nucleotide sequences (II) (ADO61534-ADO63778). The sequences can be used to produce transgenic plants, which overexpress (II), where the transgenic plant has an altered trait as compared to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New recombinant polynucleotide encoding transcription factor polypeptides, useful for producing transgenic plants with advantageous properties compared to a reference plant.
                                                                           Sequence 174 AA;
                                                                                                                            ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                            not form part of the printed specification, electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          non-transgenic plant or wild-type plant. The transgenic plant compris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         increased germination in cold,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    increased tolerance to osmotic stress,
  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Heard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 2185; 510pp; English
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92.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              n in cold, increased tolerance to heat, increased increased tolerance to freezing conditions,
Score 423.5; DB 8
Pred. No. 2.5e-54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Creelman
, Keddie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 increased tolerance to cold
                           DB 8;
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Sherman BK;
                     Length 174;
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Comprehens (I) and nucleatide sequences (II) (ADDS134-ADDS3778). The Comprehens (II) where the transgenic plant has an altered trait as compared to a naltered trait selected from increased tolerance to abiotic stress. Compared to an altered trait selected from increased tolerance to abiotic stress. Compared to an altered trait selected from increased tolerance to abiotic stress. Compared to an altered trait selected from increased tolerance to abiotic stress. Compared tolerance to osmotic stress, increased tolerance to cold; increased tolerance to heat, increased compared tolerance to freezing conditions, increased tolerance to freezing conditions, increased tolerance to disease, including compared tolerance to low nitrogen conditions, increased tolerance to disease, including concerns to low phosphate conditions, increased tolerance to disease, including concerns to low property to low particularly to ABA, reduced sensitivity to ABA, altered sensity, altered sensity, reduced content, altered sensity, reduced to sensity, reduced to sensity, altered sensity, reduced to altered sensity, altered vacular tissue structure, reduced to altered sensity, sensity, altered development, altered send send send coloration, altered development, altered send send send coloration, altered send ripening, altered send send coloration, altered send ripening, altered send coloration, altered send propens, large sendings, large sendings, large sendings, lar
                                                          decreased anthocyanin levels. Note: The sequence data for this not form part of the printed specification, but was obtained in electronic format directly from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New recombinant polynucleotide encoding transcription factor polypeptides, useful for producing transgenic plants with adproperties compared to a reference plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plant; transcription factor; transgenic plant; abiotic stress tolerance; osmotic stress tolerance; cold tolerance; heat tolerance; low phosphate tolerance; fungal disease; glyphosate resistance; flowering; fertility; seed development.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to novel plant transcription factor proteins (I) and nucleotide sequences (II) (ADO61534-ADO63778). T
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17-DEC-2002; 2002US-0434166P
24-APR-2003; 2003US-0465809P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 2171; 510pp; English.
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V, Dubell AN,
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Sherman E
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The invention relates to a transgenic plant having increased abiotic stress tolerance as compared to non-transgenic plants of the same species, where the transgenic plant comprises in its genome a transgene encoding a polypeptide member of the G482 subclade of the non-LEC1-like clade of proteins of the LIL-related CCAAT transcription factor family, where overexpression of the polypeptide member confers abiotic stress tolerance. The invention also relates to a seed from the transgenic plant, a method for producing a transgenic plant having increased tolerance to abiotic stress comprising providing an expression vector comprising the polypuclectide sequence encoding the polypeptide, and regulatory elements operably linked to the nucleotide sequence, where the regulatory elements are effective to control expression vector into a plant cell, growing the plant cell, allowing the plant to overexpress the plant cell, allowing the spression vector into a plant cell, are plant stress tolerant plants so produced by comparing the one or more abiotic stress tolerant plants with one ore more non-transgenic plants of the same species, and a method for increasing a plant's tolerance to abiotic stress comprising providing the
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Best Local Similarity
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Kumimoto
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bioinformatic research methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New transgenic plant having increased abiotic compared to non-transgenic plants of the same
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30-SEP-2003; 2003US-00675852.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REQDRYLPIANISRIMKKALPPNGK-----IAKDAKDTMQECVSEFISFITSEASEKC 79
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Repetti PP, Co
RW, Pilgrim ML;
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85.1%;
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Century KS, Gutterson
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Pred. No. 2.5e-54;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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Matches 86
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New isolated polynucleotide encoding leafy cotyledon1-related transcription factor, useful in facilitating studies for bettu undersetanding of plant embryogenesis, or providing genetic to manipulation of plant growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maize; balsam pear; eucalyptus; rice; soybean; bread wheat; plant; leafy cotyledon1-related transcription factor; plant embryogenesis; LEC1-related transcription factor; thale cress; plant breeding.
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Pred. No. 2.5e-54;
0; Mismatches 8;
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                                              for the
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ABRAGOLT 9
ABRAGOLT 1

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Matches 84
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                                                                                                                                                                                                                                                                                                                        Allen
Jones
                                                                                                                            Novel nucleotide fragment encoding polypeptides having receptor-like protein kinase activity, caleosin-like activity, useful for altering oil phenotypes in plants such as sunflower, coconut, soybean, wheat and rice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plant; oil trait; oil phenotype; altered lipid profile; MAP kinase; receptor-like protein kinase; mitogen activated protein kinase; oil; LIPI5-like transcription factor caleosin; ATP citrate lyase; SNF1; CKC-like transcription factor; antisense inhibition; co-suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 178 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JUN-2001; 2001US-0301913P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-JUN-2002; 2002WO-US020152
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zea mays oil trait
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                                                                             Claim 12; Page 451; 542pp; English
                                                                                                                                                                                                                                                                                            Tarczynski
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                                                                                                                                                                                                                                                                                                                                                                                                     (DUPO ) DU PONT DE NEMOURS & CO
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                                                                                                                                                                                                                                                                                                                        Allen W
Kinney
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                                                                                                                                                                                                                                                                                                       1 WB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein; 178
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91.0%;
83.2%;
                                                                                                                                                                                                                                                                                                                        Cahoon
Klein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 417.5; DB Pred. No. 2e-53;
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                                                                                                                                                                                                                                                                                                                     Epelbaum S, Famodu OO, H
Li C, Oliveira IC, Sakai
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                                                                                                                                                                                                                                                                                                                        Harvell LT;
ai H, Shen
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The present invention describes an isolated nucleotide fucomprising a nucleic acid sequence (NS) chosen from a NS

fragment encoding

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ADI42322
ID ADI42
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sugar sensing; flowering; flower structure; stem bifurcation; branching pattern; apical dominance; trichome; stem morphology; root growth; root hair; seed development; cell proliferation; cell differentiation; premature senescence; necrosis; plant size; leaf morphology; seed morphology; seed biochemistry; root anthocyanin; plant anthocyanin; light response; shade avoidance; bioinformatic;
                                                                                                                                                                                                                                                               (RIEC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      glyphosphate tolerance; hormone sensitivity; disease resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Plant transcription factor #302.
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                                                                                                                                                                              (HAAK/)
(CREE/)
                                                                                                                                                                                                                                                                                                                                                                              18-APR-2001; 2001US-00837944
                                                                                                                                                                                                                                                                                                                                                                                                                                       25-FEB-2003; 2003US-00374780.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transcription factor; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       transgenic; plant; enhanced tolerance to abiotic stress;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-APR-2004
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                                                            (REUB/
                                                                                                                                                (RATC/
                                                                                                                                                                                                                                       HEAR/
                                                                                                                                                                                                                                                                                                                           (SHER/)
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HEARD J B.
HAAKE V.
CREELMAN R A.
RATCLIFFE O.
ADAM L J.
REUBER T L.
KEDDER J.
BROUN F E.
BROUN F E.
                                                                                                                                                                                                                                                            SHERMAN B K.
RIECHMANN J
JIANG C.
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83.2%;
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Pred. No. 2e-
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RESULT 11
ADI42323
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC polymuclectide of any one of more than 500 nucleotide sequences fully confirmed in the specification or its complement. The method of the cinvention can be used to produced a plant having altered traits such as: complement of the complement of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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Best Local
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             transgenic; plant; enhanced tolerance to abiotic stress; glyphosphate tolerance; hormone sensitivity, disease resistance; sugar sensing; flowering; flower structure; stem bifurcation; branching pattern; apical dominance; trichome; stem morphology; root growth; root hair; seed development; cell proliferation; cell differentiation; premature senescence; necrosis; plant size; leaf morphology; seed morphology; seed biochemistry; root anthocyanin; plant anthocyanin; light response; shade avoidance; bioinformatic; transcription factor; gene; ds.
                                                                                                                                                                                                                                        Plant transcription factor #303
                                                                                                                                                                                                                                                                                      22-APR-2004
                                                                                                                                                                                                                                                                                                                               ADI42323;
                                                                                                                                                                                                                                                                                                                                                                         ADI42323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    creation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention describes a transgenic plant comprising a recombinant polynucleotide of any one of more than 500 nucleotide sequences ful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 785; 435pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New transgenic plant comprising a of more than 500 nucleotide sequen
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(PINE/)
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PINEDA O.
YU.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ĭ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                      standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC
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A, Ratcliffe O,
Dubell AN, Pir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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83.2%;
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Adam LJ,
                                                                                                                                                                                                                                                                                                                                                                           179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 417.5; DB
Pred. No. 2e-53;
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Reuber TL,
fu G;
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Keddie J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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Best Local S
Matches 84
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                                                                                                                                                                                                  increased root growth; increased root hairs; altered seed development; altered cell proliferation or cell differentiation; rapid development; premature senescence; increased necrosis; increase in seedling or plant size; decreased plant size; leaf morphology; seed morphology; seed biochemistry; increase in root anthocyanins; increase in plant anthocyanins, or alteration in light response or shade avoidance. The transgenic plant, polymucleotides and polypeptides are useful in bioinformatic search methods. This is the amino acid sequence of a plant transcription factor, and an orthologue of Arabiodopsis thaliana transcription factors isolated in the invention, that can be used in the creation of a transgenic plant with altered traits.
                                                                                                                                                                                                                                                                                                                                                                 The invention describes a transgenic plant comprising a recombinant polynucleotide of any one of more than 500 nucleotide sequences fully defined in the specification or its complement. The method of the invention can be used to produced a plant having altered traits such as: enhanced tolerance to abiotic stress; glyphosphate tolerance; hormone sensitivity, disease resistance; sugar sensing; early or late flowering; altered flower structure, change in stem bifurcations, altered branching pattern, reduced apical dominance, reduced tritchome density; lack of trichomes; reduced ectopic trichome development; altered trichome development; increase in trichome number; altered stem morphology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New transgenic plant comprising a recombinant of more than 500 nucleotide sequences, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 786; 435pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-132245/13.
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Pilgrim ML,
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                                                                                                                                                                           Sequence 179
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RBUB/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-APR-2001; 2001US-00837944
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 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADAM L J.
REUBER T L.
KEDDIE J.
BROUN P E.
PILGRIM M L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HEARD J B.
HAAKE V.
CREELMAN R A.
RATCLIFFE O.
                                                                                                                                Similarity
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QREKRKTINGDDLLWAMATLGFEDYIEPLKVYLQKYREMEG
                QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG
                                                       REQURFUPIANISRIMKKAIPANGK-----IAKDAKETVQECVSEFISFITSEASDKC
                                                                    REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                                                                                                                 Conservative
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Ratcliffe O, Adam La
Dubell AN, Pineda O,
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                                                                                                                              91.0%;
83.2%;
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Adam LJ, Reuber TL,
neda O, Yu G;
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                                                                                                                             Score 417.5; DB Pred. No. 2e-53;
                                                                                                                 Mismatches
                                                                                                                                              BB
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Keddie
                                                                                                                                            Length 179;
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                                                                                                                 Gaps
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RESULT 13
AAG04651
ID AAG04

AAG04651 standard; protein; 141 AA.

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RESULT 12
ADC23665
ID 23665
ID 23665
ID 23665
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                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a novel method for altering oil phenotype in plants through the controlled expression of selective genes, useful in plant breading. Specifically, it refers to the isolated nucleic acid sequences of cDNA clones that encode polypeptides homologous to proteins of the Hap transcription factor family. Hap proteins have been shown to be regulators of several important genes involved in lipid biosynthesis, such as fatty acid synthase, and are also involved in diverse processes from cell cycle regulation to metabolic control and homeostasis. The present invention describes proteins having Hap2-like or Hap5-like transcription factor activity, or alternatively Hap3/Lec1-like activity, which can be used to transform plants such that it is possible to select those with an altered phenotype. This polypeptide sequence is a protein homologous to those involved in altering plant oil phenotypes, in an exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel nucleotide fragment encoding polypeptides having Hap2, Hap5 Hap3/Lec1 like activity useful for altering oil phenotypes in planas sunflower, coconut, soybean, wheat and rice.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Glycine max
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lipid biosynthesis; Hap2-like; Hap5-like; Hap3/Lec1-like; soybean
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                                                                                                                                                                                                                                                                                                                                                         Sequence 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 11; SEQ ID NO 170; 202pp; English.
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                                                                                                                                                                                                                                                                   Local
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DB; ADC23664.
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                           61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
                                                                                                                                                 1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC
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                                                                                                                  REQURFLPIANISRIMKKAIPANGK-----IAKDAKETVQECVSEFISFITSEASDKC
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Dliveira IC,
                                                                                                                                                                                                                                       Conservative
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83.2%;
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Shen B, Tarczynski MC;
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                                                                                                                                                                                                                                                                Score 417.5;
Pred. No. 3.8
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17-UN-1999; 18-UN-1999; 18-UN-1999; 18-UN-1999; 18-UN-1999; 18-UN-1999; 18-UN-1999; 18-UN-1999; 18-UN-1999;	MAY - JUN -	1 - MAY 1 -	25-FEB-1999; 05-MAR-1999; 09-MAR-1999; 23-MAR-1999; 25-MAR-1999; 25-MAR-1999; 01-APR-1999; 06-APR-1999; 16-APR-1999; 19-APR-1999; 23-APR-1999; 23-APR-1999; 23-APR-1999; 23-APR-1999; 23-APR-1999; 23-APR-1999; 23-APR-1999;	AAG04651; 17-OCT-2000 Arabidopsis ti Protein ident hybridisation s termination s Arabidopsis ti EP1033405-A2. 06-SEP-2000;
222222222			99US-0121825P 99US-0123180P 99US-0123548P 99US-0126264P 99US-0126264P 99US-012628P 99US-0128734P 99US-0128734P 99US-0128734P 99US-013085P 99US-0130449P 99US-0130891P 99US-0131449P 99US-0131449P 99US-0131449P 99US-0131449P	(first entry) thaliana protein fragment SEQ ID NO: 757. thification; signal transduction pathway; metabolic pathway; nassay; genetic mapping; gene expression control; promoter; sequence. thaliana. 2000EP-00301439.
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-0149 -0149 -0149 -0149 -0149 -0149	-0144 -0144			99US-0139462P 99US-0139463P 99US-0139750P 99US-0139763P 99US-0139817P 99US-0140353P 99US-0140354P 99US-0140695P 99US-0140695P 99US-0141287P 99US-0141287P 99US-0141287P 99US-0142803P 99US-0142803P

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RESULT 14
ADE37175
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Matches 82
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11-SEP-1999

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          ADE37175;
                           ADE37175 standard; protein;
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Similarity 81.2%;
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                                                                                   QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG
                                                                         QKEKRKTVNGDDLLWAMATLGFEDYLEPLKIYLARYRELEG
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Pred. No. 4.1e-53;
3; Mismatches 9;
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DB; ADE37174.
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transcription factor; tolerance; environmental condition; microbial disease; fungal disease; viral disease; pest infestation; herbicide sensitivity; heavy metal tolerance; heavy metal uptake; growth improvement; photocondition; nutrient uptake; hormone sensitivity; transgenic plant.
                                                                                                 09-AUG-2001; 2001US-0310847P.
19-NOY-2001; 2001US-0336049P.
11-DEC-2001; 2001US-0338692P.
14-JUN-2002; 2002US-00171468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plant yield related protein from clone
                                                                                                                                                                                                          09-AUG-2002; 2002WO-US026966.
                                                                                                                                                                                                                                                                                          WO2003014327-A2
                                                                                                                                                                                                                                                                                                                                  Arabidopsis thaliana.
                                                          (MEND-) MENDEL BIOTECHNOLOGY INC
                 Riechmann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first
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             Į,
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Jiang
un PE;
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                     Adam
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New stress-related transcription factor polynucleotides and polypeptides, useful for producing transgenic plants with e.g. improved tolerance to diseases or pests, decreased herbicide sensitivity, or improved nutrient

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Yu GL,

Broun

Disclosure; SEQ ID NO 114; 470pp; English

The invention relates to a number of cDNA sequence and their encoded proteins which are especially transcription factor cDNAs and their proteins. The isolated or recombinant polynucleotide is useful for producing a modified plant with a modified trait, e.g. enhanced tolerance to environmental conditions, improved tolerance to microbial, fungal or viral diseases, improved tolerance to pest infestation, decreased herbicide sensitivity, improved tolerance of heavy metals, or enhanced ability to take up heavy metals, improved growth under poor photoconditions, improved nutrient uptake, or reduced hormone sensitivity. The transgenic plants are useful for growing a progeny plant comprising the desired trait. The polynucleotides and polypeptides are also useful in bioinformatic search methods. This sequence represents one of the proteins of the invention.

7;

Length 141;

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Similarity
                QXBKRKTINGDDLLWAMATLGFEDYIBPLKVYLXXYREXEG
                                                                      REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC
                                                         REQDRYLPIANISRIMKKALPPNGK-
QKEKRKTVNGDDLLWAMATLGFEDYLEPLKIYLARYRELEG
                                                                                                               90.3%;
ilarity 81.2%;
Conservative
                                                                                                              Score 414.5; DB 7;
Pred. No. 4.1e-53;
3; Mismatches 9;
                                                         QECVSEFISFITSEASDKC
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ADF50740 standard; protein; 141 ₿ 밁 δ 밁 ş

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                                                                                                                                                                                                                 This invention relates to novel genes for phenotypically modifying a CC plant using transgenics. Specifically, it comprises a recombinant CC polynucleotide encoding a transcription factor having an altered trait CC compared with the wild-type plant and hence exhibiting an altered associated CC with a plant trait. The present invention describes two novel CC transcription factors, identified as G481 and G1466 from Arabidopsis CC thaliana that provide altered phenotypic traits when over-expressed in CC the seed of transgenic plants. A wide range of traits can be modified CC using these transcription factors and related antisense molecules to CC alter the plant's properties including tolerance of abiotic or biotic Streess e.g. from drought or viral infection, production of secondary CC metabolites and storage nutrients e.g. starch, vitamins or sterols; and CC also the physical characteristics and growth can be altered to charge for CC example leaf and flower senescence. This polypeptide sequence is the CC Arabidopsis thaliana G481 protein of the invention.
                                                                                                                                          Query Match
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Matches 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transgenic plants with altered traits, e.g. resistance to stress or increased oil content, contain recombinant DNA encoding specific transcription factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            thale cress; transgenic; transcription factor; G481; abiotic; biotic stress; drought; secondary metabolite; storage nutrient; sterol; starch; leaf; flower senescence.
                                                                                                                                                                                                                 Sequence 141 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; SEQ ID NO 2; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-811784/76.
N-PSDB; ADF50739.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-FEB-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arabidopsis thaliana.
                                                                   61
                                                                                                                                            82;
                                                                                                                                        h 90.3%; Score 414.5; DB 7; Length 141;
Similarity 81.2%; Pred. No. 4.1e-53;
82; Conservative 3; Mismatches 9; Indels 7
QXEKRKTINGDDLLWAMATLGFEDYIBPLKVYLXXYREXEG 101
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Search completed: November 17, 2005, 08:58:53 Job time : 166 secs

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Result
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Listing first 45 summaries
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             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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CBFA MAIZE
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Q9ZQC3
Q84NF1
Q82NT8
Q82NT8
Q84NF1
Q851T8
Q831T8
Q84NF1
Q851T8
Q851T8
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Q851T8
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CBFA_CHICK
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Q6MVJ9
Q6T2F0
CBFA_HUMAN
CBFA_HOUSE
CBFA_RAT
Q6RG77
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Q9s1g0 arabidopsis
Q67x/2 arabidopsis
Q91f13 arabidopsis
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Q84vf3 oryza sativ
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Q9s1k5 oryza sativ
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CBFA MAIZE
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AC P25209;
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ALIGNMENTS	Q00735 Q00735 Q00736 Q6DD00 CBFA PETMA O59848 Q7895 Q78295 O76256 Q942Y5 Q742Y5 Q942Y5 Q942Y4 Q82248 Q8WQQ1 Q6C1B2 Q6C1B2	0805.60
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Interpro; IPR003956; CBFA NFYB.

Interpro; IPR003957; CBFA NFYB domain.

Interpro; IPR003957; CBFA NFYB topis.

Interpro; IPR003957; HistTAP.

Interpro; IPR007124; HistTAP.

Interpro; IPR007124; HistTAP.

Interpro; IPR009072; HistOne-fold.

Pfam; PF00808; CBFD NFYB HMF; 1.

PRINTS; PR00615; CCFAITSUBUNTA.

PROSITE; PS00685; CBFA NFYB; 1.

Activacor; DNA-binding; Nuclear protein; Tr
DOMAIN

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Commain.

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Li X.-Y., Mantovani R., Hooft van

Benoist C., Mathis D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
PACCAD clade; Panicoideae; Andropogoneae; Zea.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1992 (Rel. 22, Created)
01-MAY-1992 (Rel. 22, Last sequence update)
05-MIU-2004 (Rel. 44, Last annotation update)
CCAAT-binding transcription factor subunit A (CCAAT-binding transcription factor protein chain B) (NF-YB) (CAAT-box DNA binding protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X59714; CAA42234.1; PIR; S22820; S22820.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HSSP; P25208; INIJ.
TRANSFAC; T05212; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or send
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entities
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -i- FUNCTION: Stimulates the transcription of various genes by recognizing and binding to a CCAAT motif in promoters, for in type 1 collagen, albumin and beta-actin genes.
-i- SUBUNIT: Heterotrimeric transcription factor composed of the components, A, B and C. NF-YB and NF-YC must interact and components, A, B and C. NF-YB and NF-YC must interact and for NF-YA association and DNA binding.
-i- SUBCELLULAR LOCATION: Nuclear.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic Acids Res. 20:1087-1091(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zea mays (Maize)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Evolutionary variation of the CCAAT-binding transcription factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            s SWISS-PROT entry is copyright. It is produced through a cween the Swiss Institute of Bioinformatics and the EMBL ENTOpean Bioinformatics Institute. There are no restrict by non-profit institutions as long as its content is ified and this statement is not removed. Usage by and foiles requires a license agreement (See http://www.isb-sib.send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S22820, S22820.
83
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QREKRKTINGDDLLWAMATLGPEDYIEPLKVYLQKYREMEG
                                                                                                                                             REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC
                                                      QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG
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120
36
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83.2%;
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                                                                                                                                                                                                                                                                                                                                                                     A domain.
B domain.
C domain.
By similarity.
                                                                                                                                                                                                                                                         Score 417.5;
Pred. No. 2.4
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                                                                                                                                                                                                                                                                                                                                                30621316CE469454 CRC64;
                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                   ; DB 1;
                                                                                                            - IAKDAKETVQECVSEFISFITSEASDKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Transcription regulation.
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RESULT

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Submitted (MAR-2003) (MAR-2003) (MAR-2005770) AAC799 EMBL; X13723; CAA7405; EMBL; BT004266; AA0422 EMBL; BT005536; AA0632
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Submitted
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MEDLINE=22086475; PubMed=12093376;

Haas B.J., Volfovsky N., Town C.D., Troukhan

Peldmann K.A., Flavell R.B., White O., Salzbe

"Full-length messenger RNA sequences greatly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=At2g38880; Synonyms=hap3a;
Arabidopsis thaliana (Mouse-ear cress).
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosid
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OSIGO; 02363;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Putative CCAAT-binding transcription factor subunit
                                                                                                                                                                                                                                                                                                                          Yamada K., Chan M.M., Chang C.H., Dale J.M., Hsuan V.W., Lee J.! Onodera C.S., Quach H.L., Tang C., Toriumi M., Wong C., Wu H.C., Yu G., Yuan S., Carninci P., Cheuk R., Hayashizaki Y., Ishida J., Jones T., Kamiya A., Kawai J., Kim C.J., Narusaka M., Nguyen M., Palm C.J., Sakurai T., Satou M., Seki M., Shinn P., Nguyen M., Palm C.J., Sakurai T., Satou K., Davis R.W., Ecker Scuthwick A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., Tripp M.G., Wu T., Shinozaki K., Davis R.W., Ecker Scholler, A., M. T., Shinozaki K., Davis R.W., Ecker Scholler, A., M. T., Shinozaki K., Davis R.W., Ecker Scholler, A., M. T., Shinozaki K., Davis R.W., Ecker Scholler, A., M. T., M. T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yamada K., Chan M.M., Chang C.H., Yamada K.S., Quach H.L., Tang C. Yu G., Yuan S., Carninci P., Chen Ishida J., Jones T., Kamiya A., K. Nguyen M., Palm C.J., Sakurai T.,
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Roundley S.D., Lin X., Kaul S., Shea T.P., Fujii C.Y., Masor Shen M., Ronning C.M., Fraser C.M., Somerville C.R., Venter Shen M., Ronning C.M., Fraser C.M., GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. Yamada K., Chan M.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. Brover V., Troukha Feldmann K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Edwards D., Smith A.G.,
Submitted (JUN-1997) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (FEB-2002)
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                    ANU-2DPAGE; O9SLGO; -.
GO; GO:0005634; C:nucleus; IEA,
GO; GO:0003677; F:DNA binding;
GO; GO:0006355; P:regulation of
                                                                                    HSSP; P25208; 1N1J.
TRANSFAC; T05198; -.
ANU-2DPAGE; Q9SLGO;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Southwick A., Tripp M.G.,
                                                                                                                                                                                                                                                                                                              Theologis A.
                                                                                                                                                      PIR; E84810; E84810.
                                                                                                                                                                      AY088554; AAM66086.1; -. BT004266; AAO42268.1; -. BT005536; AAO63956.1; -.
                                                                                                                                                                                                                                   tted (MAR-2003) to the EMBL/GenBank/DDBJ
AC005770, AAC79602.2; -.
Y13723; CAA74051.1; -.
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D., Smith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FROM N.A.
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'nci P., Chen H., L.,
'nci P., Kawai J., Klama A., Kawai J., Klama A., Satou M., S
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the EMBL/GenBank/DDBJ
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                         transcription,
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D., Salzberg S.L.;
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WA TOTOKI Y., Seki M., Ishida J., Nakajima M., Enju A., Kamiya A.,

WA TOTOKI Y., Seki M., Ishida J., Nakajima M., Enju A., Kamiya A.,

WA Narusaka M., Shin-i T., Nakagawa M., Sakamoto N., Oishi K., Koharary.,

WA Kobayashi M., Toyoda A., Sakaki Y., Sakurai T., Iida K., Akiyama K.,

WA Satou M., Toyoda T., Konagaya A., Carninci P., Kawai J.,

WA Hayashizaki Y., Shinozaki K.;

WI Targe-scale analysis of RIKEN Arabidopsis full-length (RAFI) cDNAs.";

RI Targe-scale analysis of RIKEN Arabidopsis full-length (RAFI) cDNAs.";

RI Targe-scale analysis of RIKEN Arabidopsis full-length (RAFI) cDNAs.";

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RI Targe-scale analysis of RIKEN Arabidopsis full-length (RAFI) cDNAs.";

RI Targe-scale analysis of RIKEN Arabidopsis full-length K., Arabidopsis full-
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Best Local S
Matches 81
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Q9LFI3;
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Q67XJ2;
Q67XJ2;
25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Transcription factor NF-Y, CCAAT-binding-like protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Arabidopsis thaliana (Mouse-ear cress).

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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InterPro; IPR003957; CBFA_NFYB_topis.
InterPro; IPR009972; Histone-fold.
InterPro; IPR007124; Hist_TAF.
InterPro; IPR007124; Hist_TAF.
Pfam; PF00808; CBFD_NFYB_HMF; 1.
PRINTS; PF00615; CCPATSUBUNTA.
PROSITE; PS00685; CBFA_NFYB; 1.
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Pred. No. 4.5e-45;
                              PRT;
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Kohara'Y.,
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GO; GO:0005634; C:nucleus; IEA.

GO; GO:0005677; F:DNA binding; IEA.

GO; GO:0003677; F:DNA binding; IEA.

GO; GO:0006355; F:regulation of transcription, DN

InterPro; IPR003956; CBFA_NFYB_domain.

InterPro; IPR003958; CBFA_NFYB_domain.

InterPro; IPR003957; CBFA_NFYB_topis.

InterPro; IPR003957; CBFA_NFYB_TOPis.

InterPro; IPR007972; Histone-fold.

InterPro; IPR0079072; Histone-fold.

InterPro; IPR0079072; Histone-fold.

INTERPRO; IPR0079072; Histone-fold.

PROSITE; PR00615; CBFA_NFYB; 1.

PROSITE; PR00615; CCAATSUBUNTA.

PROSITE; PS00685; CBFA_NFYB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
Ecker J.R.;
Submitted (I
[2]
                                    Shinn P., Chen H., Cheuk R., Kim C.J., Meyers M.C., Banh J., Bowser L., Carninci P., Chang E., Dale J.M., Goldsmith A.D., Hayashizaki Y., Ishida J., Jones T., Kamiya A., Karlin-Neumann Kawai J., Lam B., Lee J.M., Lin J., Miranda M., Narusaka M., Nguyen M., Onodera C.S., Palm C.J., Quach H.L., Sakurai T., Sat Seki M., Southwick A., Tang C.C., Toriumi M., Wu H.C., Yamada K Yamamura Y., Yu G., Yu S., Shinozaki K., Davis R.W., Theologis
                                                                                                                                                                              At2g37060/T2N18.18.
Arabidopsis thaliana (Mouse-ear Cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosid
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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01-MAR-2002 (TrEMBLrel.
05-JUL-2004 (TrEMBLrel.
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                                                                                                                                                                                                                                                                                                             Q8VYK4
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Submitted (AUG-2000) to the EM
EMBL; AL132966; CAB67641.1; -.
PIR: T45874; T45874.
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Bukaryota; Viridiplantae; Streptophyta; Embryophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core e
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=F4P12_40;
Arabidopsis thaliana
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation updat
Transcription factor NF-Y, CCAAT-binding-like pro
                                                                                                                                        SEQUENCE FROM N.A.
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REQDRFLPIANISRIMKRGLPLNGK
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                (DBC-2001) to
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                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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the EMBL/GenBank/DDBJ
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                EMBL/GenBank/DDBJ
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Last sequence update)
Last annotation updat
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Pred. No. 5.
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Matches 80
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023310;
01-JAN-1998
                                                        Submitted [5]
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01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
06-JUL-2004 (Putative in the sequence update)
07-JUL-2004 (TrEMBLrel. 27, Last sequence update)
08-JUL-2004 (TrEMBLrel. 05, Last sequence update)
09-JUL-2004 (TrEMBLrel. 05, Last sequence update)
09-JUL-20
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                                                                                                   SEQUENCE FROM N.A.
Seki M., Ida K., Satou M., Saku:
Nakajima M., Enju A., Kamiya A.,
Hayashizaki Y., Shinozaki K.,
Submitted (NOV-2002) to the EMBL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bevan M., Stiekema W., Murphy G., Wambutt R., Pohl T., Terryn Kreis M., Kavanagh T., Entian K.D., Rieger M., James R., Puigdomenech P., Hatzopoulos P., Obermaier B., Duesterhoft A., Jones J., Palme K., Ansorge W., Delseny M., Bancroft I., Mewes Schueller C., Chalwatzis N.; Submitted (JUL-1997) to the EMBL/GenBank/DDBJ databases.
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GO; GO:0005677; F:DNA binding; IBA.
GO; GO:0006355; F:regulation of transcription, DNA-dependent; IEA.
GO; GO:000608; CBED NFYB HMF; 1.
PRINTS; PRO0615; CCĀATSUBUNTA.
PROSITE; PRO0685; CBFA NFYB; 1.
GEOGRAFIES; PSO0685; CBFA NFYB; 1.
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EU Arabidopsis sequencing project;
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ
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                  SEQUENCE FROM N.A.
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AY091673; AAM10272.1;
P25208; 1N1J.
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79.2%;
                                                                                                                                                                                                                                            Sakurai T.,
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                                                                                                        EMBL/GenBank/DDBJ databases
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                                                                                                                                                                                        Akiyama K., Ishida
ka M., Carninci P.,
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                                                                                                                                                                                             Kawai J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Satou M.,
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TRANSFAC; T05340; ...
TRANSFAC; T05340; ...
GO; GO:0005677; F:DNA binding; IEA.
GO; GO:0003677; F:DNA binding; IEA.
GO; GO:000355; P:regulation of transcription, DNA-dependent; IEA
R GO; GO:000355; P:regulation of transcription, DNA-dependent; IEA
R InterPro; IFR003956; CBFA_NFYB.
DR InterPro; IFR003958; CBFA_NFYB domain.
DR InterPro; IFR003957; CBFA_NFYB topis.
DR InterPro; IFR003957; CBFA_NFYB HMF; 1.
DR Pfam; PF00808; CBFA_NFYB HMF; 1.
DR PFNNTS; PR00615; CCAATSUBUNTA.
DR PROSITE; PS00685; CCBFA_NFYB; 1.
PROSITE; PS00685; CCBFA_NFYB; 1.
DR PROSITE; PS00685; CCBFA_NFYB; 1.
DR PROSITE; PS00685; CCBFA_NFYB; 1.
DR PROSITE; PS00685; CBFA_NFYB; 1.
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Best Local 9
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              GO; GO:0005634; C:nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
GO; GO:000357; P:regulation of transcri
InterPro; IPR003956; CBFA NFYB domain.
InterPro; IPR003958; CBFA NFYB topis.
InterPro; IPR003957; CBFA NFYB topis.
InterPro; IPR003957; CBFA NFYB topis.
InterPro; IPR003971; Histone-fold.
InterPro; IPR00397124; Histone-fold.
InterPro; IPR00515; CGAATSUBUNTA.
PRINTS; PR00615; CGAATSUBUNTA.
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EMBL, 297336; CAB10233.1; -.

EMBL; BT003684; AA039912.1; -.

EMBL; BT003684; AA039912.1; -.

EMBL; BT003684; AA039912.1; -.
                                                                                                                                                                                                              Edwards D., Smith A.G., Mu
Submitted (JUN-1997) to th
EMBL; Y13724; CAA74052.1;
HSSP; P25208; INLJ.
                                                                                                                                                                                                                                                                                                                                     Arabidopsis thaliana (Mouse-ear cress).

Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosid

eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                              O23634;
01-JAN-1998 (TrEMBLrel.
01-JAN-1998 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
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                                                                                                                                                                                               TRANSFAC; T05195; -.
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                                                                                                                                                                                                                                                                                     FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                            (Fragment).
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05, Last sequence update)
26, Last annotation update)
                                                                                                                                                                                                                                                 Murray J.A.;
the EMBL/GenBank/DDBJ
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                                                                                                                                        of transcription,
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                                                                                                                                             DNA-dependent; IEA
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QPFGJJ
IDPFGJJ
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Best Local S
Matches 77
                     Submitted (MAY-2001) to the EMBL/GenBank/DDBJ dat
EMBL; AB025628; BAB09990.1; -.
EMBL; AF078026; AAL77727.1; -.
EMBL; AF385744; AAK60334.1; -.
EMBL; AF385744; AAK6034.1; -.
EMBL; AAK60334.1; -.
EMBL; AAK
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Bukaryota, Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eu
eurosids II; Brassicales; Brassicaceae; Arabidopsis.

NCBI TaxID=3702;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shinn P., Chen H., Cheuk R., Kim C.J., Koesema B., Meyers M.C., Tracy S.E., Banh J., Bowser L., Carninci P., Chung M.K., Goldsmith A.D., Hayashizaki Y., Ishida J., Jones T., Kamiya A., Goldsmith A.D., Kawai J., Lam B., Lee J.M., Lin J., Liu S.X., Karlin-Neumann G., Kawai J., Lam B., Lee J.M., Lin J., Liu S.X., Miranda M., Narusaka M., Nguyen M., Palm C.J., Pham P.K., Quach Sakano H., Sakurai T., Satou M., Seki M., Southwick A., Tang C.C Torium M., Yamada K., Yu G., Shinozaki K., Davis R.W., Theologi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [1]
SEQUENCE FROM N.A.
Katoh T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9FGJ3 PRELIMINARY; PRT; 190 AA.
Q9FGJ3;
Q1-MAR-2001 (TrEMBLrel. 16, Created)
Q1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
Q5-JUL-2004 (TrEMBLrel. 27, Last annotation update)
Similarity to CCAAT-box-binding trancription factor
(AT5977640/MNJ7-23).
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Tabata S.;
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76.2%;
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Pred. No. 1.7e
6; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        databases.
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                                                                                                                                                                                                                                                                                                          DNA-dependent;
   CRC64;
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RESULT 11
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Best Local (
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InterPro; IPR003958; CBFA_NFYB_domain.
InterPro; IPR003957; CBFA_NFYB_topis.
InterPro; IPR003957; Histone-fold.
InterPro; IPR007124; Hist_TAF.
InterPro; IPR007124; Hist_TAF.
Pfam; PF00808; CBFD_NFYB_HMF; 1.
PRINTS; PR00615; CCATSUBUNTA.
PROSITE; PS00685; CCBFA_NFYB; 1.
SEQUENCE 178 AA; 19523 MW; B3CF49738
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                                                                                                                                                                                                                                                                                                                                                                                                                  Town C.D., Kaul S.;
Submitted (FEB-2002) to the
EMBL; AC006260; AAD18153.1;
PIR; A84788; A84788.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lin X., Kaul S., Shea T.P., Fujii C.Y., Shen M., Vanaken S.E., Barnstead M.B., Mason T.M., Bowman C.L., Ronning C.M., Benito Carrera A.J., Creasy T.H., Buell C.R., Town C.D., Nierman W.C. Fraser C.M., Venter J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arabidopsis thaliana (Mouse-ear cress).

Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosid
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Putative CCAAT-box binding trancription factor.
                                                                                                                                                                                                                                                                                                                                                               GO; GO:0005634; C:nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
GO; GO:0006355; P:regulation of transcription,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (MAR-2000)
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                                                                                                  OREKRKTINGDDLLWAMATLGFEDYMEPLKVYLMRYREGD
                                                                                                                                                  REQUEFLPIANISRIMKRGLPANGK----
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78.0%;
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76.2%;
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Pred. No. 2.9e
5; Mismatches
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Pred. No. 1.7e
6; Mismatches
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                                                                                                                                                                                                                                                   B3CF497383EC86C4 CRC64;
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ches 10;
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Q84VF3; 01-JUN-2003 01-JUN-2003

(TrEMBLrel. (TrEMBLrel. PRELIMINARY;

24, 24,

Created) Last seq

sequence update)

PRT;

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Q84VF3

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RESULT 12
Q84NF1
ID Q84NF
AC Q84NF
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AC Q84NF
DT 01-UL
DT 01-MAP3.
GN Name-
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RR GO; GO:0003677; F:DNA binding; IEA.

RR GO; GO:0003677; F:DNA binding; IEA.

RR GO; GO:000355; P:regulation of transcription, DNA-dependent; IEA.

RR Interpro; IPR003958; CBFA_NFYB_

RR Interpro; IPR003958; CBFA_NFYB_domain.

RR Interpro; IPR003957; CBFA_NFYB_Topis.

RR Interpro; IPR003957; CBFA_NFYB_TOPIS.

RR Interpro; IPR00307124; Histone-Fold.

RR Interpro; IPR00307124; Histone-Fold.

R PEANT; PR00808; CBFD_NFYB_HMF; 1.

R PFANT; PR00808; CBFD_NFYB_HMF; 1.

R PROSITE; PR00615; CCBATSUBUNTA.

R PROSITE; PS00685; CBFA_NFYB; 1.
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Best Local S
Matches 79
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Gramene; Q84VF3; --
GO; GO:0005634; C:nu
GO; GO:0003677; F:DN
GO; GO:0006355; P:re;
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Q84NF1;
01-JUN-2003
01-JUN-2003
01-MAR-2004
       Gramene; (GO; GO; GO: 00) GO; GO: 00) GO: 00) InterPro;
                                                                                                                                                                                                                   MEDLINE-22983257; PubMed=14617083; Miyoshi K., Ito Y., Serizawa A., Ku "OshAP3 genes regulate chloroplast Plant J. 36:532-540(2003).

EMBL; AB095438; BAC76331.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oryza sativa (japonica cultivar-group).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
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EMBL; AY224530; AAO72650.1; -.
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Cooper B., Hutchison D., Park S., Guimi
Goff S.A., Glazebrook J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Name=OsHAP3A;
                                                                                                                                                                                        HSSP; P25208;
                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=39947;
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                                 mene; Q84NF1; -. GO:0005634; C:nucleus; IEA. GO:0003677; F:DNA binding; I GO:0006355; Piregulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
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(TrEMBLrel. 24, Last sequence update)
(TrEMBLrel. 26, Last annotation update)
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           CBFA NFYB
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Pred. No. 1.1e-41
1; Mismatches
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                                         transcription,
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st biogenesis
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Gramene, Q881T8;

GO; GO:0005634; C:nucleus; IEA.

GO; GO:0005677; F:DNA binding; IEA.

GO; GO:0003677; F:DNA binding; IEA.

GO; GO:0006355; P:regulation of transcription, DN.

R InterPro; IPR003956; CBFA_NFYB.

R InterPro; IPR003958; CBFA_NFYB_tomain.

R InterPro; IPR003958; CBFA_NFYB_topis.

InterPro; IPR003957; Histone-fold.

InterPro; IPR003971; Histone-fold.

InterPro; IPR003971; Histone-fold.

InterPro; IPR003971; Histone-fold.
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X PubMed-1244/438; DOI=10.1038/nature01184;

X Sasaki T., Matsumoto T., Yamamoto K., Sakata K., Baba T., Katayose Y.

A Mu J., Nimura Y., Cheng Z., Nagamura Y., Antonio B.A., Kanamori H.,

A Hosokawa S., Masukawa M., Arikawa K., Chiden Y., Hayashi M.,

A Okamoto M., Ando T., Aoki H., Arita K., Hamada M., Hijima M., Iikeda M.,

A Okamoto M., Ando T., Aoki H., Arita K., Idonuma A., Iijima M., Iikeda M.,

A Hijishita S., Honda M., Inhawa Y., Idonuma A., Iijima M., Iikeda M.,

A Ikeno M., Itoh S., Itoh T., Itoh Y., Idonuma A., Kaniya K.,

A Karasawa W., Katagiri S., Kikuta A., Kobayashi N., Kono I.,

Karasawa W., Katagiri S., Kikuta A., Kobayashi T., Mukai Y.,

A Machita K., Mashara T., Mizuno H., Nizubayashi T., Mukai Y.,

A Nagasaki H., Nakashima M., Nakama Y., Nakamichi Y., Nakamura M.,

A Nagasaki H., Nakashima M., Ohta I., Ono N., Saji S., Sakai, K., Shibata M.,

A Namiki N., Negishi M., Ohta I., Ono N., Saji S., Sakai, K., Shibata M.,

A Namiki N., Yamagata H., Yamane H., Yoshiki S., Yoshihara R., Yukawa K.,

Waki K., Yamagata H., Endo T., Ito H., Hahn J.H., Kim H.I., Bun M.Y.,

Nama H., Endo T., Ito H., Hahn J.H., Kim H.I., Bun M.Y.,
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InterPro; IPR003957; CBFA_NFYB_topis.
InterPro; IPR003957; Histone-fold.
InterPro; IPR007124; Hist_TAF.
InterPro; IPR007124; Hist_TAF.
Pfam; PF000808; CBFD_NFYB_HMF; 1.
PRINTS; PR00615; CCAATSUBUNTA.
PROSITE; PS00685; CBFA_NFYB; 1.
SEQUENCE 178_AA; 19700 MW; 1D620383B
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
NCBI_TaxID=39947;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yao Q., Peng R., Xio Submitted (JUN-2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhong H., Iwama H., Endo T., Ito H
Yano M., Jiang J., Gojobori T.;
"The genome sequence and structure
Nature 420:312-316(2002).
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01-JUN-2002
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21, Last sequence update)
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10, The protein (CCAAT-binding
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R GO; GO:0005634; C:nucleus; IEA.

R GO; GO:0005677; F:DNA binding; IEA.

R GO; GO:0003677; F:DNA binding; IEA.

R GO; GO:0003655; P:regulation of transcription, DNA-dependent; IEA.

R InterPro; IPR003956; CBFA_NFYB domain.

R InterPro; IPR003958; CBFA_NFYB topis.

R InterPro; IPR003958; CBFA_NFYB topis.

R InterPro; IPR003957; Histone-fold.

R InterPro; IPR009072; Histone-fold.

R InterPro; IPR007124; Hist TAF.

R Pfam; PF00808; CBFA_NFYB HMF; 1.

R PRINTS; PR00615; CCBATSUBUNTA.

R PROSITE; PS00685; CBFA_NFYB; 1.

R PROSITE; PS00685; CBFA_NFYB; 1.
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Q69J40;
25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Putative transcription factor.
Name=OSJNBA0072106.11; Synonyms=P0493C06.26;
Oryza sativa (japonica cultivar-group).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Oryza Bativa nipponbare(GA3) genomic DNA, chromosome clone:P0493C06.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Oryza sativa nipponbare(GA3) genomic DNA, clone:OSJNBa0072I06.";
Submitted (MAY-2003) to the EMBI/Gambart/--
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PROSITE; PSOD685; CBFA NFYB; 1
SEQUENCE 189 AA; 20752 MW;
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74
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                                    QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXXREXEG 101
                                                                                                                  REQDRFLPIANVSRIMKRALPANAK-----ISKDAKETVQECVSEFISFITGEASDKC
                                                                                                                                                   REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEPISFITSEASXKC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QKEKRKTINGEDLLFAMGTLGFEEYVDPLKIYLHKYREMEG 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QXEKRKTINGDDLLWAMATLGFEDYIBPLKVYLXXYREXEG 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REQURFLPIANISRIMKKAVPANGK-----IAKDAKETLQECVSEFISFVTSEASDKC 71
      QREKRKTINGODLLWAMTTLGFEDYIDPLKLYLHKFRELEG
                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                            84.6%;
75.2%;
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                                                                                                                                                                                                                              Score 388.5; DB 2;
Pred. No. 1.6e-41;
7; Mismatches 11;
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05-JUL-2004
05-JUL-2004
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                  G; GO:0005634; C:nucleus; IEA.
GO; GO:0003637; F:DNA binding; IEA.
GO; GO:000355; P:regulation of transcription, DNA-dependent; IEA.
InterPro; IPR003956; CBFA NPYB.
InterPro; IPR003957; CBFA NPYB. domain.
InterPro; IPR003957; CBFA NPYB. Dopis.
InterPro; IPR003957; CBFA NFYB. Topis.
InterPro; IPR003957; CBFA NFYB. Topis.
InterPro; IPR003972; Histone-fold.
InterPro; IPR007124; Hist TAF.
Pfam; PF00808; CBFD NPYB HWF; 1.
PRINTS; PR00615; CCAATSUBUNTA.
PROSITE; P800685; CCFA NFYB; 1.
                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bi X.-Z., Khush G.S., Bennett J.;
Submitted (NOY-2001) to the EMBL/GenBank/DDBJ databases
EMBL, AY062181; AAL47206.1; -.
HSSP; P19267; 1A7W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oryza sativa (indica cultivar-group).
Eukaryota; Viridiplantae; Streptophyta; En
Spermatophyta; Magnoliophyta; Liliopsida;
Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=IR64;
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   76
                                                                 61
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                                                                                                                                                                                             1 REQURYLPIANISRIMKKALPXNGKXXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
                                                                                                                                                                                                                                                                                                 Similarity
                                                       QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
QREKRKTINGDDLLWAMTTLGFEDYVDPLKHYLHKFREIEG
                                                                                                                                  REQDRFLPIANVSRIMKKALPANAK-----ISKDAKETVQECVSEFISFITGEASDKC
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(TrEMBLrel. 27, Last sequence update)
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Pred. No. 2.9e
6; Mismatches
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a; Poales; Poaceae;
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Search completed: November 17, 2005, 08:55:33 Job time: 170 secs

RESULT Q6YNK1

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               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Match
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Copyright (c) 1993 - 2005 Compugen Ltd.
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US-09-538-092-1008
US-09-943-016-7348
US-09-103-478-21
US-09-103-478-24
US-09-103-478-25
US-09-103-931C-24
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Sequence 20, Appl Sequence 30, Appl Sequence 30, Appl Sequence 1051, Appl Sequence 11051, Appl Sequence 11051, Appl Sequence 21, Appl Sequence 24, Appl Sequence 25, Appl Sequence 25, Appl Sequence 25, Appl Sequence 25, Appl Sequence 31, Appl Sequence 31, Appl Sequence 31, Appl Sequence 32, Appl Sequence 33, Appl Sequence 32, Appl Sequence 32, Appl Sequence 32, Appl Sequence 36, Appl Sequence 37, Appl Sequence 38, Appl Sequence 36, Appl Sequence 36, Appl Sequence 11, Appl Sequence 11, Appl Sequence 12, Appl Sequence 14, Appl Sequ
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62.9	62.9	62.9	64.2	64.2	65.3	65.3	65.3	67.0	67.2	67.2	67.2	67.2	67.2	68.7	69.0	69.2	69.6
144	144	108	164	131	90	90	90	171	208	208	208	208	208	109	278	108	216
4	ω	4	4	4	4	w	w	4.	4	4	4.	w	w	4	4	4	4
US-09-538-092-15	US-09-319-989-4	US-09-640-211A-1090	US-09-270-767-44270	US-09-270-767-59691	US-09-516-052-29	US-09-193-931C-19	US-09-103-478-19	US-09-435-054A-20	US-09-516-052-2	US-09-533-029-70	US-09-026-221-2	US-09-193-931C-2	US-09-103-478-2	US-09-248-796A-18639	US-09-435-054A-2	US-09-640-211A-1174	US-09-516-052-22
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
15, Appl	4, Appli	1090, Ap	44270, A	59691, A	29, Appl	19, Appl	19, Appl		2, Appli	70, Appl	2, Appli	 Appli 	 Appli 	18639, A	2, Appli	•	22, Appl

ALIGNMENTS

TELEPHONE: (415) 576-0200 TELEPAX: (415) 576-0200 INFORMATION FOR SEQ ID NO: 20: SEQUENCE CHARACTERISTICS: LENGTH: 90 amino acids TYPE: amino acid STRANDENNESS: TOPOLOGY: linear MOLECULE TYPE: peptide US-09-103-478-20	LICATION DATA: LICATION UMBER: US/09/103,478 TE: 24-UW-1998 ATION: 800 CATION DATA: CATION DATA: US 09/026,221 ON NUMBER: US 09/026,221 TE: 19-FEB-1998 CATION DATA: US 08/804,534 TE: 21-FEB-1997 ENT INFORMATION: INFORMATION: CATION UMBER: 38,440 /DOCKET NUMBER: 023070-0 /DOCKET NUMBER: 023070-0	R OF SEQUENCES: 29 SPONDENCE ADDRESS: ESSESE: Townsend and Townsend and Crew LLI EST: Two Embarcadero Center, Eighth Floor Y: San Francisco TS: Calofornia YTRY: USA YTRY: USA TSR READABLE FORM: 10M TYPE: Floppy disk PUTER: IBM PC compatible PUTER: BM PC Compatible ATTING SYSTEM: PC-DOS/MS-DOS ATTING SYSTEM: PC-DOS/MS-DOS WARE: Patentin Release #1.0, Version #1.3	RESULT 1 US-09-103-478-20 US-09-103-478-20; Sequence 20, Application US/09103478; Sequence 20, Application US/09103478; Patent No. 6235975; GENERAL INFORMATION: APPLICANT: Harada, John APPLICANT: Lotan, Tamar APPLICANT: Ohto, Masa-aki APPLICANT: Goldberg, Robert B. APPLICANT: Fischer, Robert B. APPLICANT: Fischer, IRABY CONVIRTION Genes and Their
			7 7 1 1 1 1 1 1 1 1

Local Similarity

83.5%;

Score 402.5; DB 3; Pred. No. 3.9e-52;

Length

90;

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APPLICANT: Goldberg, Robert B.
APPLICANT: Fischer, Robert L.
APPLICANT: The Regents of the University of California ITILE OF INVENTION: LEAFY COTYLEDONI Genes and Their Uses FILE REFERENCE: 023070-077620
FURRENT APPLICATION NUMBER: US/09/193,931C
FURRENT APPLICATION NUMBER: US 09/193,931C
FURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US 09/103,478
PRIOR FILING DATE: 1998-06-24
PRIOR FILING DATE: 1998-02-19
PRIOR FILING DATE: 1998-02-19
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR APPLICATION NUMBER: US 08/804,534
PRIOR FILING DATE: 1997-02-21
PRIOR PILING DATE: 1997-02-21
PRIOR PILING DATE: 1997-02-21
PRIOR PILING DATE: 1997-02-21
PRIOR PILING DATE: 1997-02-21
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US-09-193-931C-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 20
LENGTH: 90
TYPE: PRT
ORGANISM: Zea mays
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20, Application US/09193931C Patent No. 6320102
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Best Local Similarity 83.5%;
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APPLICANT:
               APPLICANT:
                                                      APPLICANT: Harada, John
APPLICANT: Lotan, Tamar
APPLICANT: Ohto, Masa-aki
APPLICANT: Goldberg, Robert B.
APPLICANT: Fischer, Robert L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Harada, John
APPLICANT: Lotan, Tamar
APPLICANT: Ohto, Masa-aki
  APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: DOMAIN
LOCATION: (1)..(90)
OTHER INFORMATION: (CBF) protein B domain homolog
                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 QXEKRKTINGDDLLMAMATIGFEDYIEPLKVYLXXYR 97
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                                                                                                                                                                                                                                                                                                                                                                                                 REQDRFLPIANISRIMKKAIPANGK-----IAKDAKETVQECVSEFISFITSEASDKC
The Regents of the University of California
                                      Bui, Anhthu
                 Khong, Raymond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 402.5; DB 3
Pred. No. 3.9e-52;
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CURRENT APPLICATION NUMBER: US/09/516,052
CURRENT FILING DATE: 2000-03-01
PRIOR APPLICATION NUMBER: US 09/193,931
PRIOR FILING DATE: 1998-11-17
PRIOR PPLICATION NUMBER: US 09/103,478
PRIOR PPLICATION NUMBER: US 09/03,478
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR PILING DATE: 1997-02-19
PRIOR PILING DATE: 1997-02-21
NUMBER OF BEQ ID NOS: 39
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                                                                                                                                                                                                                             ; ORGANISM: Physicomitrella patens
US-09-828-303-23
                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 23
LENGTH: 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: CENT & SILVA, OSWALDO DA
APPLICANT: BOHNERT, HANS J.
APPLICANT: VAN THIELEN, NOCHA
APPLICANT: CHEN, ROUYING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. SEQ ID NO 30
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                                                                                                                                                            Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 16313-0030
CURRENT APPLICATION NUMBER: US/09/828,303
CURRENT FILING DATE: 2001-08-20
PRIOR APPLICATION NUMBER: 60/196,001
PRIOR FILING DATE: 2000-04-07
NUMBER OF SEQ ID NOS: 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: TRANSCRIPTION FACTOR STRESS-RELATED PROTEINS AND TITLE OF INVENTION: METHODS OF USE IN PLANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: LEAFY COTYLEDON1 Genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: (1)..(90)
OTHER INFORMATION: maize HAP3 subunit of CCAAT box-binding factor
OTHER INFORMATION: (CBF) protein B domain homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Zea mays FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                      TYPE: PRT
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                                                                                  1 REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
                                                        REQDRFLPIANVSRIMKKALPSNAK-----ISKDAKETVOECVSEFISFITGEASDKC 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QREKRKTINGDDLLWAMATLGFEDYIEPLKVYLQKYR
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                                                                                                                                        Conservative
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83.5%;
                                                                                                                                                            87.5%;
78.2%;
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Pred. No. 3.9e-52;
                                                                                                                                                            Score 401.5; DB 4;
Pred. No. 1.7e-51;
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; NAME/KEY: misc feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Polypeptide Accession Number P25208
US-09-538-092-1008
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                                                                                                               Query Match
Best Local Similarity 67.3
                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same FILE REPERENCE: 15966-542
CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 60/127,352
PRIOR FILING DATE: 1999-04-01
PRIOR PRILING DATE: 2090-02-01
PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CUraPatSeqFormatter Version 0.9
SEQ ID NO 1008
LENGTH: 207
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Compositions and Methods for the TITLE OF INVENTION: Modification of Gene Transcription FILE REFERENCE: 11000.1021C1U CURRENT APPLICATION NUMBER: US/09/640,211A CURRENT FILING DATE: 2000-08-16 NUMBER OF SEQ ID NOS: 2368 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent No. 6753314
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1008, Application US/09538092 Patent No. 6753314
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wood, Marion
APPLICANT: Shenk, Michael A.
APPLICANT: McGrath, Annette
APPLICANT: Glenn, Matthew
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Pinus radiata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 2
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 75.2
les 76; Conservative
61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYRE 98
                                            53 REQDIYLPIANVARIMKNAIPQTGK-----IAKDAKECVQECVSEFISFITSEASERC 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        77
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                                                                       1 REQDRYLFIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
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                                                                                                                                                    73.5%; Score 337.5; DB 4; Length 207; 67.3%; Pred. No. 5.5e-42;
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                                                                                                                               12; Mismatches
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Pred. No. 6.8e-51;
7; Mismatches 11
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                                                                                                                               13; Indels
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; ORGANISM: Human
US-09-949-016-7348
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CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR PILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PastSEQ for Windows Version 4.0 SEQ ID NO 7348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION: APPLICANT: VENTER, J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No. 681233
                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PatentIn Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/103,478
FILLING DATE: 24-JUN-1998
CLASSIFICATION: 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lotan, Tamar
APPLICANT: Ohto, Maga-aki
APPLICANT: Goldberg, Robert B.
APPLICANT: Fischer, Robert L.
TITLE OF INVENTION: LEAFY COTYLEDON1 Genes and Their Uses
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,221
FILING DATE: 19-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Townsend and Townsend and Crew LLP STREET: Two Embarcadero Center, Eighth Floor CITY: San Francisco
                                                                                                                                                                                                                                                                              ZIP: 94111-3834
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PRIOR APPLICATION DATA:

FILING DATE: 21-FEB-1997 ATTORNEY/AGENT INFORMATION:

Binhorn,

Gregory P.

APPLICATION NUMBER: US 0 FILING DATE: 21-FEB-1997

US 08/804,534

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; MOLECULE TYPE: peptide
US-09-103-478-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (415) 576-0300
INFORMATION FOR SEQ ID NO: 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
NAME: Einhorn, Gregory P.
REGISTRATION NUMBER: 38,440
REFERENCE/DOCKET NUMBER: 023070-077611US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                          SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/103,478 FILING DATE: 24-TUN-1998 CLASSIFICATION: 800 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,221 PILING DATE: 19-FEB-1998 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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LENGTH: 90 amino acids
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TELEPHONE: (415) 576-0200
                                                                                               APPLICATION NUMBER: US 0 FILING DATE: 21-FEB-1997 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITLE OF
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STATE: Calofornia
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REFERENCE/DOCKET NUMBER: 023070-077611US
                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
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I: Fischer, Robert L.
INVENTION: LEAFY COTYLEDONI Genes and Their Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E: Townsend and Townsend and Crew LLP Two Embarcadero Center, Eighth Floor
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Ohto, Masa-aki
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                                                                                                                                            US 08/804,534
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Query Match

72.4%;

Score 332.5;

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Length 90;

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Best Local Similarity
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                                                                                    TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO: 3 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                          FILING DATE: 24-JUN-
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Fischer, Robert L.
TITLE OF INVENTION: LEAFY COTYLEDON1 Genes and Their Uses
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS
                                                                                                                                                         REFERENCE/DOCKET NUMBER: 02
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                       FILING DATE: 21-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Einhorn, Gregory P.
REGISTRATION NUMBER: 38,440
                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 09/026,221
FILING DATE: 19-FEB-1998
PRIOR APPLICATION DATA:
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MOLECULE TYPE:
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TYPE: amino acid
STRANDEDNESS:
                               STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: San Francisco
STATE: Calofornia
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                  TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/103,478
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                                                    TYPE: amino acid
                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                                     ENGTH:
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                                                                     90 amino acids
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peptide
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                                                                                                                                          576-0200
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                                                                                                                                                                                 023070-077611US
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APPLICANT: Harada, John
APPLICANT: Lotan, Tamar
APPLICANT: Ohto, Masa-aki
APPLICANT: Ohto, Masa-aki
APPLICANT: Goldberg, Robert B.
APPLICANT: Fischer, Robert L.
APPLICANT: Fischer, Robert L.
APPLICANT: The Regents of the University of California
TITLS OF INVENTION: LEAFY COTYLEDON1 Genes and Their Uses
FILE REFERENCE: 023070-077620
CURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US 09/103,478
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR FILING DATE: 1998-02-19
PRIOR APPLICATION NUMBER: US 08/804,534
PRIOR FILING DATE: 1998-02-21
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                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24, Application US/09193931C Patent No. 6320102
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LENGTH: 90
           APPLICANT: Harada, John
APPLICANT: Lotan, Tamar
APPLICANT: Ohto, Masa-aki
APPLICANT: Goldberg, Robert B.
APPLICANT: Fischer, Robert L.
APPLICANT: Fischer, Robert L.
APPLICANT: The Regents of the University of California
APPLICANT: The Regent California Transport Tra
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 29
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CURRENT APPLICATION NUMBER: US/09/193,931C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: DOMAIN
LOCATION: (1)..(90)
OTHER INFORMATION: chicken HAP3 subunit of CCAAT box-binding factor
OTHER INFORMATION: (CBF) protein B domain homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Loca1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72.4%; Score 332.5; DB 3 67.0%; Pred. No. 1.1e-41;
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.2; Mismatches 13;
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APPLICANT: Ohto, Masa-aki
APPLICANT: Goldberg, Robert B.
APPLICANT: Goldberg, Robert L.
APPLICANT: Goldberg, Robert L.
APPLICANT: The Regents of the University of California TITLE OF INVENTION: LEAFY COTYLEDON1 Genes and Their Uses FILE REFERENCE: 023070-077620
CURRENT APPLICATION NUMBER: US/09/193,931C
CURRENT FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US 09/03,478
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR TILING DATE: 1998-02-19
PRIOR FILING DATE: 1998-02-19
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
                                                             Matches
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Patent No. 6320
                                                                                                  Query Match
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                                                                                                                                                           NAME/KBY: DOMAIN
LOCATION: (1)..(90)
OTHER INFORMATION: m
OTHER INFORMATION: (
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PRIOR APPLICATION NUMBER: US 09/103,478
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR TILING DATE: 1998-02-19
PRIOR APPLICATION NUMBER: US 08/804,534
PRIOR FILING DATE: 1997-02-21
                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 29
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ORGANISM: Mus
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OTHER INFORMATION: human HAP3 subunit of CCAAT Box-binding factor
OTHER INFORMATION: (CBF) protein B domain homolog
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                                                                                  Local
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1 REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lotan, Tamar
                                                             Conservative
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                                                                                                                                                                                                                                                                  musculus
                                                                                                                                                           mouse/rat HAP3 subunit of CCAAT box-binding (CBF) protein B domain homolog
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                                                                               72.4%;
                                                                                                                                                                                                                                                                and Rattus norvegicus
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                                                        Score 332.5; I
Pred. No. 1.1e-
12; Mismatches
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Pred. No. 1.1e-41;
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                                                                                  1.1e-41
                                                                                                DB 3;
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ORGANISM: Gallus sp.
FEATURE:
I PRATURE:
I NAME/KEY: DOMAIN
LOCATION: (1)..(90)
OTHER INFORMATION: chicken HAP3 subunit of CCAAT box-binding factor
OTHER INFORMATION: (CBF) protein B domain homolog
US-09-516-052-31
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CURRENT FILING DATE: 2000-03-01
PRIOR APPLICATION NUMBER: US 09/193,931
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US 09/103,478
PRIOR FILING DATE: 1998-06-24
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR PILING DATE: 1998-02-19
PRIOR FILING DATE: 1998-02-19
PRIOR FILING DATE: 1997-02-21
NUMBER OF SEQ ID NOS: 39
PRIOR FILING DATE: 1997-02-21
NUMBER OF SEQ ID NOS: 39
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LENGTH: 90
TYPE: PRT
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Matches
                                                       APPLICANT: Harada, John
APPLICANT: Lotan, Tamar
APPLICANT: Ohto, Masa-Aki
APPLICANT: Goldberg, Robert
APPLICANT: Fischer, Robert
APPLICANT: Bii, Anthhu
APPLICANT: Bui, Anthhu
APPLICANT: Khong, Raymond
                                                                                                                                                                                                                                   Sequence 34, Application US/09516052
Patent No. 6781035
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Best Local (
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Patent No. 678103
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  FILE
                      APPLICANT:
TITLE OF I
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REFERENCE: 023070-077630US
                                                                                                                                                                                                               INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65;
                                                                                                                                                                                                                                                                                                                                                                   54 HQEKRKTINGEDILFAMSTLGFQSYVEPLKLYLQKFR 90
                 T: The Regents of the University of California
INVENTION: LEAFY COTYLEDON1 Genes and Their Uses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            h 72.4%; Score 332.5; DB 4
Similarity 67.0%; Pred. No. 1.1e-41;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   REQDIYLPIANVARIMKNAIPQTGK-----IAKDAKECVQECVSEFISFITSEASERC
                                                                              Goldberg, Robert B. Fischer, Robert L. Bui, Anhthu
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Fischer, Robert L.
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Ohto, Masa-Aki
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CURRENT FILING DATE: 2000-03-01
PRIOR APPLICATION NUMBER: US 09/193,931
PRIOR FILING DATE: 1998-11-17
PRIOR APPLICATION NUMBER: US 09/103,478
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR APPLICATION NUMBER: US 09/026,221
PRIOR APPLICATION NUMBER: US 08/804,534
PRIOR APPLICATION NUMBER: US 08/804,534
                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 3:
SOFTWARE: PatentIn Ver.
SEQ ID NO 34
                                                                                                                                                                     Matches
                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                              NAME/KEY: DOMAIN
LOCATION: (1)..(90)
OTHER INFORMATION: human HAP3 subunit of CCAAT Box-binding factor
OTHER INFORMATION: (CBF) protein B domain homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 1997-02-21
                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 90
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                        Local
                       61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYR 97
54 HOEKRKTINGEDILFAMSTLGFOSYVEPLKLYLOKFR 90
                                                                                  1 REQDIYLPIANVARIMKNAIPQTGK-----IAKDAKECVQECVSEFISFITSBASERC
                                                                                                              1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC
                                                                                                                                                                   65; Conservative
                                                                                                                                                                                    72.4%; Score 332.5; DB 4; 67.0%; Pred. No. 1.1e-41;
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                                                                                                                                                                     Mismatches
                                                                                                                                                                     13;
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Search completed: November 17, 2005, 08:56:02
Job time : 26 secs

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Perfect score:
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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
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Copyright (c) 1993 - 2005 Compugen Ltd.
/cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
                 gn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
gn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
gn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
gn2_6/ptodata/1/pubpaa/USO9A_PUBCOMB.pep:*
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cgn2_6/ptodata/1/pubpaa/USO9_REW_PUBCOMB.pep:*
cgn2_6/ptodata/1/pubpaa/USO9_NEW_PUBCOMB.pep:*
cgn2_6/ptodata/1/pubpaa/USIOA_PUBCOMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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423.5	423.5	423.5	423.5	423.5	423.5	423.5	423.5	425	425	429	Score
92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.6	92.6	93.5	Query
174	174	174	173	173	173	160	160	185	185	101	Query Match Length
17	15	15	17	17	15	17	15	17	17	17	DB .
US-10-675-852-84	US-10-425-114-39733	US-10-424-599-274840	US-10-675-852-24	US-10-678-588A-6	US-10-424-599-274836	US-10-675-852-26	US-10-374-780A-802	US-10-675-852-42	US-10-678-588A-2	US-10-678-588A-8	ID
Sequence 84, Appl	Sequence 39733, A	Sequence 274840,	Sequence 24, Appl				Sequence 802, App		Sequence 2, Appli	Sequence 8, Appli	Description

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
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174	174	174	215	177	177	177	182	182	182	179	141	141	141	141	141	141	141	141	234	188	183	179	178	178	178	178	178	178	171	171	176	171	185
15	15	14	15	15	15	14	15	15	14	17	20	17	17	17	15	15	15	14	15	17	17	15	17	17	15	15	15	14	17	15	17	16	15
US-10-399-883-2	83-687	-10-18	-10-374-	-10-	-10-183-	0-180-	US-10-399-883-24	-183-687-	-10-180-375-1	-10-675-85	-069-255-	-225-068-	-675-	US-10-678-588A-7	-10-412-699B-1	-10-374-780A-8	-10-225-068-	-10-112-887-2	10	-10-675-852-3	US-10-675-852-56	-10-374-78	-10-675	-10-67	-10-399-	-10-374-780	-687-	US-10-180-375-197	-10-675-852-12	-10-424-599-1	-10-675-852-6	-10-739-930-9	US-10-425-114-48992
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2, Appli	282, App		791, App	4, Appli	284, App	154, App	24, Appl	304, App		60, Appl	2, Appli	114, App	2, Appli	7, Appli	1782, Ap	88, Appl			Ξ	•	56, Appl	98	σ	3, Appli	32, Appl	785, App	ω	197, App		195353,	4		48992, A

ALIGNMENTS

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OTHER INFORMATION: XAA CAN DE THY OY NOME FEATURE: NAME/KEY: MISC_FEATURE	0	FEATURE: OTHER INFORMATION: protein consensus sequence	ORGANISM: Artificial sequence	TYDR: PRT	SEQ ID NO 8	SOFTWARE: PatentIn version 3.2	PRIOR FILING DATE: 2003-04-11		FILING DATE: 2002-11-08	PRIOR APPLICATION NUMBER: US 60/425.157	APPLICATION NUMB	CURRENT FILING DATE: 2003-10-02	CURRENT APPLICATION NUMBER: US/10/678,588A	TITLE OF INVENTION: Water-Deficit-TolerantTransgenic Plants	APPLICANT: Wu, Jingrui	GRNERAL INFORMATION:	Sequence 8, Application US/10678588A	RESULT 1 US-10-678-588A-8

LOCATION: (27)..(27)
OTHER INFORMATION: Xaa can

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or none

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RESULT 2
US-10-678-588A-2
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; LOCATION: (99)..(99)
; OTHER INFORMATION: Xaa can
US-10-678-588A-8
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Sequence 2, Application US/10678588A
Publication No. US20050022266A1
GENERAL INFORMATION:
APPLICANT: Wu Jingrui
TITLE OF INVENTION: Water-Deficit-TolerantTransgenic Plants
FILE REFERENCE: 38-21(52578)C
                                                                                                                                                                                                                                                    Matches 101;
                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
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NAME/KEY: MISC FEATURE
LOCATION: (62) ... (62)
OTHER INFORMATION: Xaa c
FEATURE:
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OTHER INFORMATION: Xaa can
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OTHER INFORMATION: Xaa can
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OTHER INFORMATION: Xaa
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                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Xaa
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OTHER INFORMATION: Xaa can
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LOCATION: (41)..(41)
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OTHER INFORMATION: Xaa can
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                                                                                                                                       QX5KRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG
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PRIOR APPLICATION NUMBER: US 60/415,758
PRIOR FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: US 60/425,157
PRIOR FILING DATE: 2002-11-08
PRIOR APPLICATION NUMBER: US 60/463,787
PRIOR FILING DATE: 2003-04-11
NUMBER OF SEQ ID NOS: 10
SEQ ID NO 2
SEQ ID NO 2
LENGTH: 185
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US-10-678-588A-2
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                                                                                                 PRIOR APPLICATION NUMBER: 60/125,814
PRIOR FILING DATE: 1999-03-23
PRIOR PELICATION NUMBER: 09/713,994
PRIOR APPLICATION NUMBER: 09/713,994
PRIOR FILING DATE: 2000-11-16
PRIOR APPLICATION NUMBER: 60/166,228
PRIOR APPLICATION NUMBER: 60/197,899
PRIOR PILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: 60/227,439
PRIOR PILING DATE: 2000-08-22
PRIOR PILING DATE: 2000-08-22
PRIOR PILING DATE: 2002-03-18
PRIOR PILING DATE: 2002-03-18
PRIOR PILING DATE: 2003-01-23
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Matches
Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 104
SOFTWARE: PatentIn version 3.2
SEQ ID NO 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 42, Application US/10675852
Publication No. US20050086718A1
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Best Local Similarity
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APPLICANT: SHERMAN, Bradley K
APPLICANT: SHERMAN, Bradley K
TITLE OF INVENTION: PLANT TRANSCRIPTIONAL REGULATORS OF ABIOTIC STRESS
FILE REFERENCE: MBI-0022CIP
CURRENT APPLICATION NUMBER: US/10/675,852
CURRENT FILING DATE: 2003-09-30
PRIOR APPLICATION NUMBER: 10/412,699
PRIOR PILING DATE: 2003-04-10
PRIOR FILING DATE: 2003-04-10
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JIANG, Cai-Zhong
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KUMIMOTO, Roderick
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KEDDIE, James S
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83.2%;
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Pred. No. 4.7e-50;
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                                                                                   See File Wrapper or PALM
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; OTHER INFORMATION: ZEAMA-08NOV01-CLUSTER719_3 polypeptide US-10-675-852-42

TYPE: PRT
ORGANISM: Zea mays
FEATURE:

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PRIOR FILING DATE: 2001-11-19
PRIOR PELICATION NUMBER: 60/338,692
PRIOR FILLING DATE: 2001-12-11
PRIOR APPLICATION NUMBER: 10/171,468
PRIOR FILLING DATE: 2002-06-14
PRIOR PELICATION NUMBER: 10/225,066
PRIOR PELICHE DATE: 2002-08-09
PRIOR APPLICATION NUMBER: 10/225,067
PRIOR APPLICATION NUMBER: 10/225,067
PRIOR APPLICATION NUMBER: 10/225,067
PRIOR APPLICATION NUMBER: 10/225,067
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SOFTWARE: PatentIn version 3.2
SEQ ID NO 802
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TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES IN PLANTS
FILE REFERENCE: MBI-0047 CIP
CURRENT APPLICATION NUMBER: US/10/374,780A
CURRENT FILING DATE: 2003-02-25
PRIOR APPLICATION NUMBER: 09/837,944
PRIOR FILING DATE: 2001-04-18
PRIOR APPLICATION NUMBER: 60/310,847
PRIOR PILING DATE: 2001-08-09
PRIOR PILING DATE: 2001-08-09
PRIOR APPLICATION NUMBER: 60/314,455
PRIOR PILING DATE: 2001-08-22
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FEATURE:
NAME/KEY: misc_feature
LOCATION: (151)..(151)
OTHER INFORMATION: Xaa can be any naturally occurring amino acid
                                                                                   FEATURE:
OTHER INFORMATION: Orthologous to G481, G482
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Similarity 83.2%;
84; Conservative
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Keddie, James
Broun, Pierre E
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Jiang, Cai-Zhong
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Pineda, Omaira
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haake, Volker
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o. US20040019927A1
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RESULT 5
US-10-675-852-26
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CURRENT APPLICATION NUMBER: US/10/675,852
CURRENT FILING DATE: 2003-09-30
PRIOR APPLICATION NUMBER: 10/412,699
PRIOR FILING DATE: 2003-04-10
PRIOR APPLICATION NUMBER: 09/533,030
PRIOR FILING DATE: 2000-03-23
PRIOR FILING DATE: 1099-03-23
PRIOR PILING DATE: 1099-03-23
PRIOR PILING DATE: 1099-03-23
PRIOR PILING DATE: 1099-03-23
PRIOR APPLICATION NUMBER: 09/713,994
PRIOR PILING DATE: 1090-11-16
PRIOR PILING DATE: 1090-11-17
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NUMBER OF SEQ ID NOS: 104
SOFTWARE: patentIn version 3.2
SEQ ID NO 26
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APPLICANT: Mendel B
APPLICANT: HEARD,
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Best Local Similarity Matches 86; Conserv
                                             Query Match
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PRIOR PILLING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: 10/112,887
PRIOR FILING DATE: 2002-03-18
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PRIOR FILING DATE: 2000-04-17
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TITLE OF INVENTION: PLANT TRANSCRIPTIONAL REGULATORS OF ABIOTIC STRESS
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                                                                                                                                    PEATURE:
NAME/KEY: misc feature
LOCATION: (151)..(151)
OTHER INFORMATION: Xaa can be any naturally occurring amino acid
PEATURE:
                                                                                                                                                                                                                                                   ORGANISM: Glycine max
                                                                                                                 OTHER INFORMATION: G3470
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                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2003-01-23
APPLICATION NUMBER: 10/225,068
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CREELMAN, Robert A
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KUMIMOTO, Roderick
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                     85.1%;
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                     Score 423.5; DB 17; Length 160; Pred. No. 6.3e-50;
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Pred. No. 6.3e-50,
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US-10-678-588A-6
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                                                                                                                                                                                                                         FILE REFERENCE: 38-21(52578)C
CURRENT APPLICATION NUMBER: US/10/678,588A
CURRENT FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,758
PRIOR FILING DATE: 2002-10-02
PRIOR PLICATION NUMBER: US 60/425,157
PRIOR FILING DATE: 2002-11-08
PRIOR PPLICATION NUMBER: US 60/463,787
PRIOR PILING DATE: 2003-04-11
NUMBER OF SEQ ID NOS: 10
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                                                                                            JS-10-678-588A-6
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APPLICANT: Wu, Jingrui
TITLE OF INVENTION: Water-Deficit-TolerantTransgenic Plants
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SEQ ID NO 274836
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Publication No. US20040031072A1
Query Match 92.3%;
Best Local Similarity 85.1%;
Matches 86; Conservative
                                                                                                                                                                                 SEQ ID NO 6
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Best Local Similarity 85.1%;
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APPLICANT: Kovalic David K
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 203-04-28
                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.2
                                                                                                            LENGTH: 173
TYPE: PRT
ORGANISM: Glycine max
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Glycine max
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Score 423.5; DB 17; Length 173; Pred. No. 6.9e-50; 0; Mismatches 8; Indels 7;
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NUMBER OF SEQ ID NOS: 104
SOFTWARE: PatentIn version 3.2
SEQ ID NO 24
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Publication No.
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Best Local Similarity
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TITLE OF INVENTION: PLANT TRANSCRIPTIONAL REGULATORS OF ABIOTIC STRESS
FILE REFERENCE: MBI-0022CIP
CURRENT APPLICATION NUMBER: US/10/675,852
CURRENT FILING DATE: 2003-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 10/412,699
PRIOR FILING DATE: 2003-04-10
PRIOR APPLICATION NUMBER: 09/533,030
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-03-22
PRIOR APPLICATION NUMBER: 60/125,814
PRIOR FILING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 09/713,994
PRIOR FILING DATE: 2000-11-16
PRIOR APPLICATION NUMBER: 60/166,228
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 10/112,887
PRIOR FILING DATE: 2002-03-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2000-08-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/227,439
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PRIOR FILING DATE: 2000-04-17
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ORGANISM: Glycine max
FEATURE:
                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 10/286,264
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                        61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
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                                                                           REQURYLPIANISRIMKKALPPNGK-----IAKDAKDTMQECVSEFISFITSEASEKC
OKEKRKTINGDDLLWAMATLGFEDYIEPLKVYLARYREAEG 119
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JIANG, Cai-Zhong
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KUMIMOTO, Roderick
GUTTERSON, Neal
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                                                                                                                                                       Conservative
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85.1%;
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Pred. No. 6.9e-50;
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                                                                                                                                                                                            Length 173;
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US-10-424-599-274840
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Matches
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Best Local Similarity 85.1
86; Conservative
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SEQ ID NO 39733
LENGTH: 174
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                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(5313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
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TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
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APPLICANT: Screen, Steven B
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
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APPLICANT: Kovalic David K
                                                                                                                                                                                                                                                             OTHER INFORMATION: Clone ID: 700677948_FLI.pep
                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                      ORGANISM: Glycine max
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                                                                                                                                                                                  Local
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                                                                                                               1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
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                           QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
QKEKRKTINGDDLLWAMATLGFEDYIEPLKVYLARYREAEG 120
                                                                             REQURYLPIANISRIMKKALPPNGK-----IAKDAKDTMOECVSEPISFITSEASEKC
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85.1%;
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                                                                                                                                                                              Score 423.5; DB 15;
Pred. No. 7e-50;
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US-10-425-114-48992

Sequence 48992, Application US/10425114 Publication No. US20040034888A1 GENERAL INFORMATION:

APPLICANT: Liu, Jingdong APPLICANT: Zhou, Yihua APPLICANT: Kovalic, David K. APPLICANT: Screen, Steven E APPLICANT: Tabaska, Jack E RESULT 12

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PRIOR FILLING DATE: 2003-04-10
PRIOR PELLICATION NUMBER: 09/533,030
PRIOR FILLING DATE: 2000-03-22
PRIOR APPLICATION NUMBER: 60/125,814
PRIOR FILLING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 09/713,994
PRIOR APPLICATION NUMBER: 09/7166,228
PRIOR APPLICATION NUMBER: 60/166,228
PRIOR APPLICATION NUMBER: 60/197,899
PRIOR APPLICATION NUMBER: 60/197,899
PRIOR APPLICATION NUMBER: 60/197,899
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NUMBER OF SEQ ID NOS: 104
SOFTWARE: PatentIn version 3.2
SEQ ID NO 84
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Publication No. US20050086718A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: SHERMAN, Bradley K
TITLE OF INVENTION: PLANT TRANSCRIPTIONAL REGULATORS OF ABIOTIC STRESS
FILE REFERENCE: MBI-0022CIP
CURRENT APPLICATION NUMBER: US/10/675,852
CURRENT FILING DATE: 2003-09-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Mendel Biotechnology, APPLICANT: HEARD, Jacqueline E APPLICANT: KEDDIE, James S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-04-17
PRIOR APPLICATION NUMBER: 60/227,439
PRIOR FILING DATE: 2000-08-22
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                                                                                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Glycine max FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 174
                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 2002-03-18
APPLICATION NUMBER: 10/286,264
FILING DATE: 2003-01-23
APPLICATION NUMBER: 10/225,068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 10/112,887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 2002-08-09
                                                                                                             1 REQDRYLPIANISRIMKKALPXNGKXXXXXXXIAKDAKXTXQECVSEFISFITSEASXKC 60
                         QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101
OKEKRKTINGUDLLWAMATLGFEDYIEPLKVYLARYREAEG 120
                                                                                    REQURYLPIANISRIMKKALPPNGK-----IAKDAKDTMQECVSEFISFITSEASEKC 79
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JIANG, Cai-Zhong
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KUMIMOTO, Roderick
GUTTERSON, Neal
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                                                                                                                                                                          Conservative
                                                                                                                                                                                            92.3%;
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                                                                                                                                                                        Score 423.5; DB Pred. No. 7e-50; 0; Mismatches
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US-10-675-852-64
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Matches
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APPLICANT: KOVALIC, DAVID K.
APPLICANT: KOVALIC, DAVID K.
TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND OTHER MOLECULES ASSOCIATED
TITLE OF INVENTION: PLANTS AND USES THEREOF FOR PLANT IMPROVEMENT
FILE REFERENCE: 38-21(53377)B
                                                  GENERAL INFORMATION:
APPLICANT: Mendel Biotechnology,
APPLICANT: HEARD, Jacqueline E
APPLICANT: KEDDIE, James S
APPLICANT: CREBLMAN, Robert A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 48992
                                                                                                                                          Sequence 64, Application US/10675852
Publication No. US20050086718A1
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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-10-425-114-48992
                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21 (53313) B CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/739,930 CURRENT FILING DATE: 2003-12-18
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APPLICANT:
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ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Clone ID: GLYMA-23APR03-C6781_1.p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Glycine max
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                                                                                                                                                                                                                                                     QREKRKTINGDDLLWAMATLGFEDYIDPLKIYLTRYREMEG
                                                                                                                                                                                                                                                                                                                           REQDRYLPIANISRIMKKALPANGK-----IAKDAKETVQECVSEFISFITSEASDKC 77
RATCLIFFE, Oliver
               PINEDA, Omaira
JIANG, Cai-Zhong
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83.2%;
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Pred. No. 7.5e-50;
0; Mismatches 8
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US-10-424-599-195353
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PRIOR FILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: 10/112,887
PRIOR FILING DATE: 2002-03-18
PRIOR APPLICATION NUMBER: 10/286,264
PRIOR FILING DATE: 2003-01-23
PRIOR APPLICATION NUMBER: 10/225,668
PRIOR APPLICATION NUMBER: 10/225,668
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
                                                                                                              APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5322))B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 19353
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 195353, Application US/10424599 Publication No. US20040031072A1
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CURRENT FILING DATE: 2003-09-30
PRIOR APPLICATION NUMBER: 10/412,699
PRIOR FILING DATE: 2003-04-10
                                                                                                                                                                                                                                                                                                             APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
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PRIOR FILING DATE: 2000-03-22
PRIOR APPLICATION NUMBER: 60/125,814
PRIOR FILING DATE: 1999-03-23
PRIOR APPLICATION NUMBER: 09/713,994
PRIOR FILING DATE: 2000-11-16
PRIOR FILING DATE: 2000-11-16
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TITLE OF INVENTION: PLANT TRANSCRIPTIONAL REGULATORS OF ABIOTIC STRESS
FILE REPERENCE; MBI-0022CIP
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                      OTHER INFORMATION: Clone
                                             FEATURE:
                                                                   ORGANISM: Glycine max
                                                                                               TYPE: PRT
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                    ID: PAT_MRT3847_18430C.1.pep
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Pred. No. 1.8
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Search completed: November 17, 2005, 09:02:28 Job time : 166 secs	Qy 61 QXEKRKTINGDDLLWAMATLGFEDYIEPLKVYLXXYREXEG 101	Qy 1 REQDRYLPIANISRIMKKALPXNGKXXXXXXIAKDAKXTXQECVSBFISFITSEASXKC 60	Query Match 91.0%; Score 417.5; DB 15; Length 171; Best Local Similarity 82.2%; Pred. No. 4.6e-49; Matches 83; Conservative 3; Mismatches 8; Indels 7; Gaps
		XKC 60 DKC 77	ps 1;

This poga alonk (uspia)